The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

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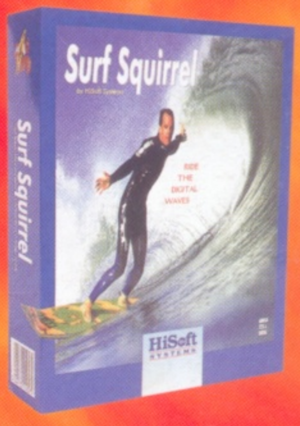
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Inside issue

The Walker is dead, long live the Amiga! That's the news from VIScorp.

This month the big news event has got to be the unveiling of VIScorp's visions for the future. Plans for the development of The Walker, a machine loved by some, but considered seriously under-powered by others, will not to come to fruition. Instead VIScorp are planning a new Amiga, possibly a PowerPC. No firm decision has been made yet and until all the alternatives, like the powerful DEC Alpha chip, have been examined, VIScorp are keeping their options open.



They are however, prepared to commit themselves to the development of a new operating system for the Amiga, and VIScorp have announced that a new version will be available in the latter quarter of this year.

The good news doesn't stop there because Phase 5 also plan to push ahead with their Power PC board. This news puts aside some of the immediate fears for the Amiga's future and, at least for the foreseeable future, there will be models of the computer available.

Further development will continue alongside VIScorp's scheduled work with their set-top box, known as ED.

The ED will enable VIScorp to put a disguised Amiga into homes all around the world and VIScorp again confirmed that they would not be breaking the Amiga's OS, which means the ED will inherit the huge software library that exists.

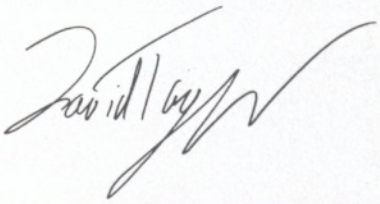
What remains unsure, is for how long the Amiga itself will continue to be in production. This is not a major cause for concern though, because the ED is designed to be the next step in the computer's evolution.

With VIScorp talking of licensing the Amiga chipset to anyone prepared to work out a deal, comes the possibility of more Amigas than ever before. Phase 5 have already taken up the offer; how many more will we see?

This has generated excitement within the whole Amiga community and you can read a more detailed report in our news pages.

Elsewhere in this issue of Amiga Shopper, you'll find reviews written by our experts of every new product available. We've got the solutions to your problems in our Amiga Answers section and our PD expert has been out scouring libraries and the Internet for the very latest software.

Don't forget our tutorials either. There's the final installment of the music series and the continuation of our How to..., AMOS and HiSoft BASIC tutorials. And this month's Coverdisk has some fine programs too, including the amazing Shareware spell checker, AlphaSpell. For more details turn to the Coverdisk pages on page 8 and for more information on the rest of the Contents of this month's Amiga Shopper turn the page now.



Turn the page for the contents of issue **65**

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E-mail: aball@futurenet.co.uk

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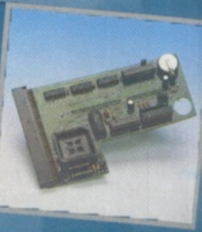
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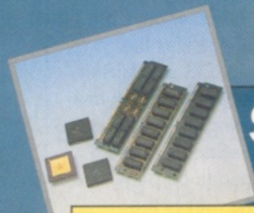
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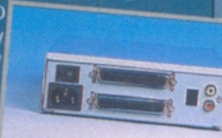
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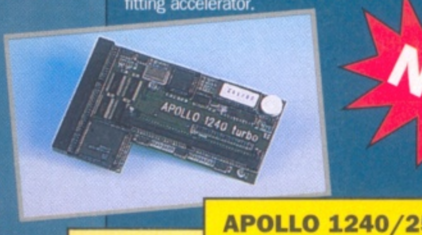
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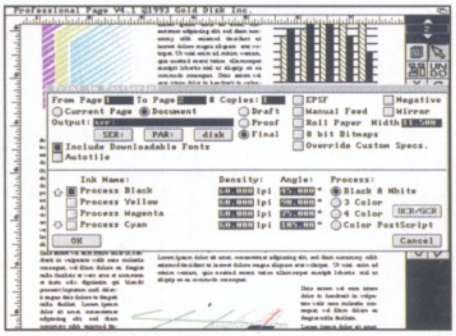
From the M62 Junction 17 head towards Bury. We are 50 yards on the right hand side after the third set of lights. The door to our premises is next to the florists opposite the Masons Pub.

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AMIGA SHOPPER

ShopperFeatures



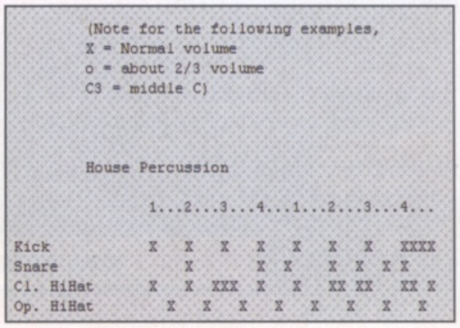
Where are they now?: ProPage is arguably the Amiga's best DTP package but what happened to it? Turn to page 46 to find out.

ShopperReviews



Graffiti Card: Check out the chunky pixel mode of this new graphics card on page 28.

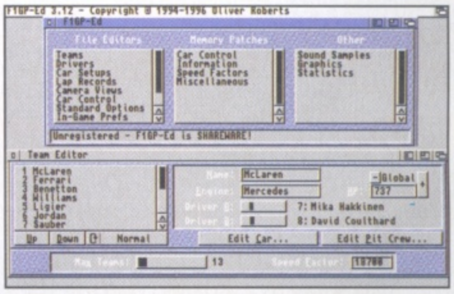
ShopperTutorials



Music: John Kennedy has some tips on how to make beautiful music on page 50.

ShopperRegulars

ShopperServices





Public Domain: There's a huge selection of games and utilities in this month's PD pages.

Mastering Multimedia

The multi-skilled Amiga

Page **16**

If you want to know how to get the most out of your Amiga's multimedia abilities then look no further. **Graeme Sandiford** *has all the information that you need in our extensive feature.*

Shopper**Disk**

Four disks packed onto a single floppy.





Cover disk

Here to serve up yet another delicious helping of Shareware programs, **David Taylor** *introduces this month's Coverdisk.*

There are some really excellent programs featured on this month's Coverdisk and we've got some that will complement your system perfectly. The incredible AlphaSpell for example can be used with many different word processors and can be constantly improved upon by yourself to include even more words. In addition to that, there's a graph creation program, a system meter and program launcher all in one and much more besides.

You'll also note that we've included two small text files. The first is a simple guide to the archives on the disk so that you know where each program is stored. The second is the text for the Amiga Answer query submissions. Should you not want to cut up your magazine, but still need to send in a question, you can now simply print out the form straight from the disk, complete that and send it in. If you don't have access to a printer, you can submit the question on disk.

ApplicationZone

AlphaSpell
Author: Fergus Duniho

Varexx
Author: Andrew Cook

AlphaSpellGUI
Author: Fergus Duniho

Because of the Amiga's excellent multitasking abilities, AlphaSpell can provide you with a spell checker for your normal text editor. Although the program comes with an example GUI, there is a better one included which makes use of ARexx to supply AlphaSpell with a full interface on your text editor screen.

Should you want to, you can run AlphaSpell from the CLI and instructions for this are included in the documentation. Use of the GUI is recommended though as it makes the program a lot more user-friendly.

To use the package, you need to get all the necessary bits ready first. Initially, you need Varexx which is the program that controls the GUI. This involves copying the two programs from the bin drawer to your C: directory on your Workbench disk. Use a file manager program to do this or simply do it straight through Workbench.

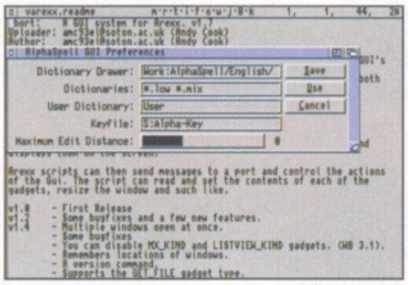
If you use Workbench, you will need to select Show All files from the Window menu. This will enable you to see the bin drawer because it doesn't have an icon. You also need to make sure you have the necessary libraries installed in your Libs: directory. If you don't have the arexxport.library, reqtools.library or the rexxreqtools.library, then you need to copy these from the libs drawer in the Varexx drawer to your libs: path.

Once this is installed, you need to install the AlphaSpell package itself. There is an installation script for the program, but you may come across an odd quirk where you get a requester for a volume called "Data:". You should either create a separate directory on your hard drive and create an assign for Data: to that path or format a blank disk and call that Data. (You can then copy all the files from that disk into a separate directory and create an assign later if you wish – floppy users can just keep this new Data disk.)

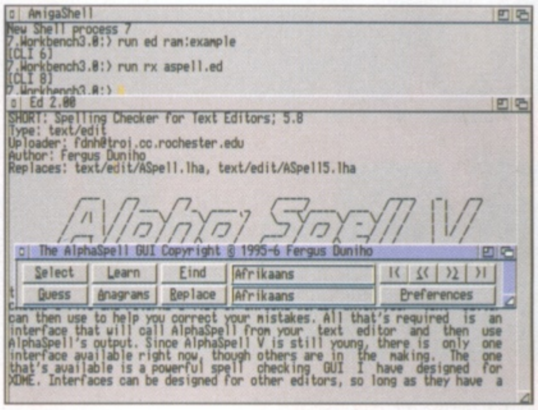
The next stage is installation of the GUI package; this too may expect the Data volume. When you are installing the GUI, you will be asked which editor or editors you want to install the scripts for. These scripts allow your text editor to communicate with AlphaSpell and vice versa. There are currently 14 different text editors supported, including Ed and BlacksEditor. If you have a comprehensive knowledge of ARexx, you can probably adapt one of these scripts to suit your own editor if it isn't amongst those supported.

When all the packages are correctly installed, you must make sure that you have ARexx running. ARexx is included on your Workbench disk and to start it you simply need to double click on the RexxMast icon in the System drawer.

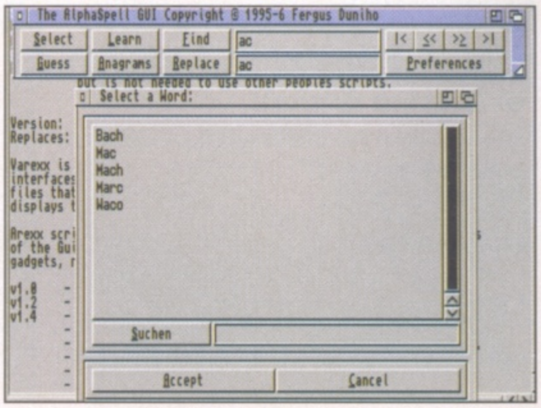
When this is done, you need to start the Varexx program, which is done by typing: Varexx GUIPATH, where GUIPATH is the path that you installed the AlphaSpellGUI to. If you are keeping everything together, this will be Data:, e.g. Varexx data:.



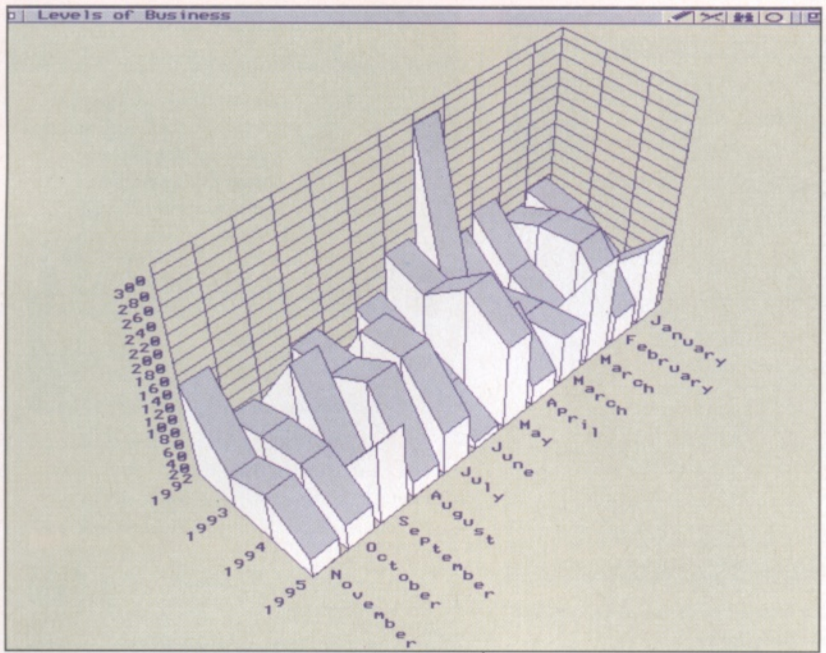
Make sure you've got all the packages you need before trying to use the program.

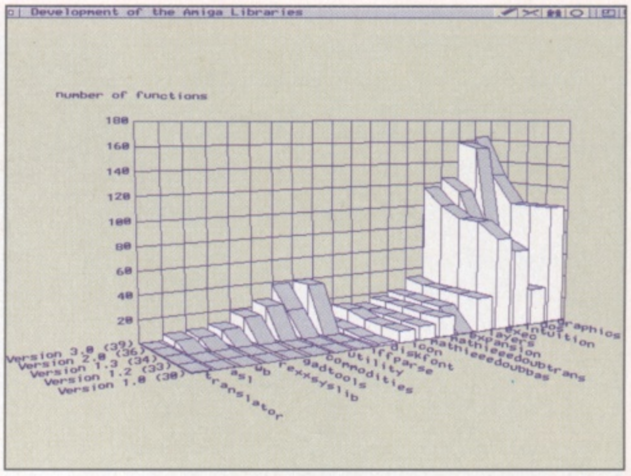


AlphaSpell can provide you with a spell checker for your normal text editor.



When installing the GUI you will be asked which editor or editors you want to install the scripts for.





ABOVE: Take the data straight from ASCII text files and input it into the editor ready for insertion onto the two axis.

LEFT: Notice how you can rotate the 3D graph enabling you to view it from any angle that you wish using the sliders on the right and bottom of the screen.

Disk contributions

This month's disks were compiled using files from Aminet and with the help of the authors of the programs.

If you would like to contribute to a future disk, whether you have a full application, utility, 40K demo, clipart, font, 3D object, or even a module, send it to:
David Taylor,
Amiga Shopper Coverdisk Contributions,
30 Monmouth Street,
Bath, Avon BA1 2BW.
Please only send the minimum distribution archive. Also, please do not powerpack (or similar) any files because it detracts from the archiving.

You should make sure you have your text editor running and you can now call the spell checker any time that you want to. To do this, just run the necessary ARexx script. For example, if you are using BlacksEditor, you just type: run rx aspell.bed into a shell.

This might all sound very complicated, but in fact it should only take you about five minutes to set the whole package up. When you've done all that you can call it up any time you want. It might even be a good idea to put the run command into your program launcher so that you can just choose it from Workbench. The most important thing to remember is that you must have ARexx running.

AlphaSpell is one of the most versatile spell checkers because it allows you to use multiple dictionaries. When you use the GUI, you will see that it checks the directory for any dictionaries named with the correct extensions. This means that you can not only edit and add to those that come with the package, but you can also use any number of the additional ones that are available. There is a much larger English dictionary available which can be found on this month's Subscribers' disk. There are also dictionaries for French, German, Swedish, Afrikaans, Latin, etc and these are included on the Cover CD of sister magazine Amiga Format this month (AF86). If you don't have access to either of these, then have a look on Aminet or contact a PD Houses as you will find most should be able to supply them.

Graph 3D

Author: Wilhelm Noeker

This is a program that allows you to draw graphs taking data from ASCII text files, which should be given a .3D extension. You create the input files very simply using a text editor that can save out ASCII files (most should be able to).

Give the Graph a title, like Levels of Business and then enter the figure for the number of entries on the X axis, say 4. On the four (or number corresponding to the number of X axis entries) following lines, type in the titles of the entries: 1992, 1993, 1994, 1995.

Next, put the figure for the number of Y axis entries. In the example shown here there are 12 entries for the number of months in a year. You then go down each entry and give it a title: January, February, etc. After each entry you must input the data for the four years. Thus, you might have the data for the four years for January inputted as:

```
January
 100
 90
 50
 120
```

This needs to be done for each month. Save out the file and you can load it into Graph 3D. Note that you can rotate the 3D graph and view it from any angle using the sliders on the right and bottom of the screen. The program uses the req.library and if you don't have this, you need to copy it from the libs drawer in Graph 3D to your libs:. If you want to get the screen as an IFF picture, you can use a screen capture utility, such as the Grab Key one in this month's Utility Zone.

UtilityZone

Tiny Meter 4.3

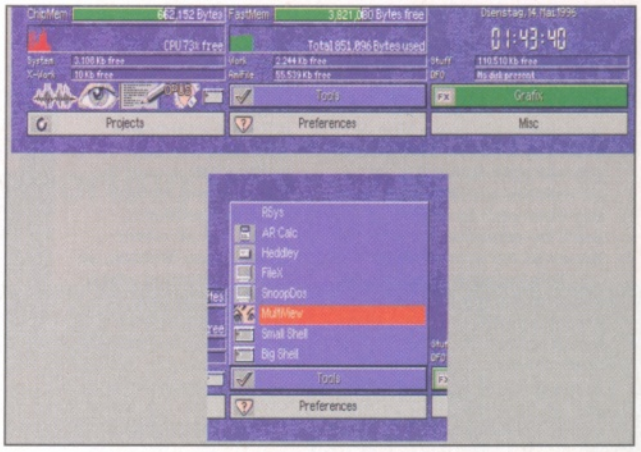
Author: Tinic Urou

This is a new version of the dashboard for the Amiga program that was included on last month's Subscribers' disk. The name of the program is somewhat misleading as Tiny Meter is now a very large package that has masses of support files. For this reason, it actually unpacks to more than one floppy disk. If you install to floppy, you should note that the second disk contains masses of small preference files and that these will take a while to unpack.

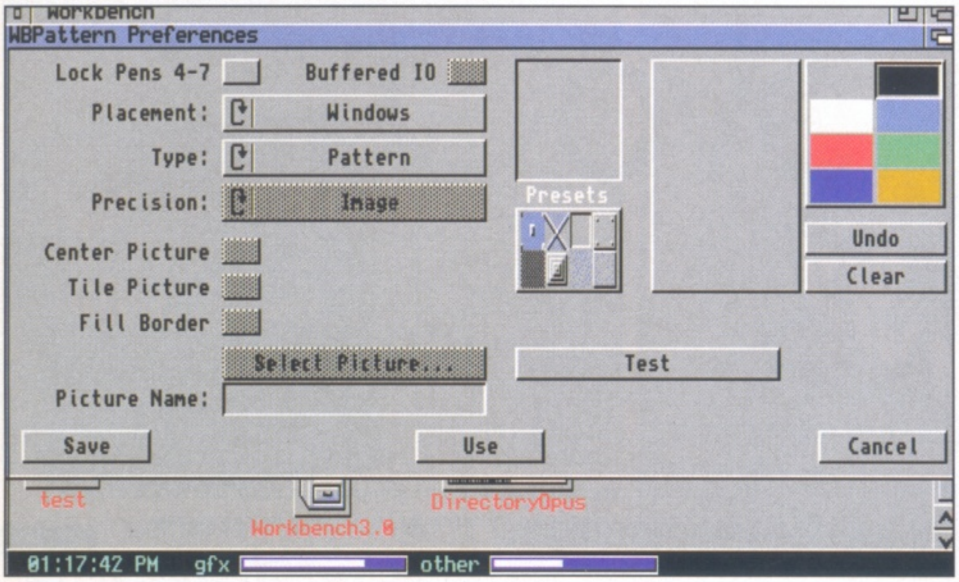
The big change for users is that in addition to all the options you have for what information Tiny Meter displays, such as memory usage, disk space and CPU usage, you can now also use it as a program launcher.

You can have all the applications incorporated into one small utility (despite coming as a large package, the program itself is a mere 43K).

You must read all the documentation really



The dashboard is packed full of information and you can now also use it as a program launcher.



The new Workbench Pattern selector is included in Fast Iprefs. It has a host of useful new options and also enables the user to take advantage of the much improved performance levels.

carefully and edit the preferences to suit your individual system. If you just try out the preference files without altering them, you will find that Tiny Meter is looking for files and volumes that cannot be found on your system.

Grab Key

Author: Timo Nentwig

This is a program that uses the datatypes.library and allows you to capture either the current screen or window as an IFF picture. The options are accessed through the icon tooltypes, but the default keys are LAlt-F1 to save the window, Lalt-F2 to save the current screen, Lalt-F3 to print the active window and Lalt-F4 to print the current screen. The default save file is GrabKey.IFF in RAM:.

Fast IPrefs

Author: Hans Schober

This is the IPrefs program that Workbench uses to load up preferences. Fast Iprefs is a version that has been re-written especially for OS3 machines.

There are quite a few advantages to this version, not least its speed increase. The package now also includes a new WBPattern selector that has many more options and gives you far better performance.

And the rest

This month's tutorial code has been included in the Programming Zone for both the AMOS and HiSoft BASIC 2 tutorials. The tutorials themselves can be found on pages 53 and 48.

The Information Zone includes newly updated Amigaguide and ASCII files for the PD Houses and the User Groups. Just double click on the icons to read them and find any information that you need. If you want to send in an entry, please read the ReadMe file and note that we only want submissions on disk from now on please. ■

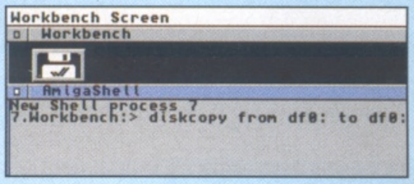
Beginners, look!



Before using this month's Coverdisk, please be sure to back it up – just in case. Simply follow the easy instructions below.



1 ***Boot up from your Workbench disk or partition, double-click on your Shell icon – to be found in your System Drawer.***



2 ***If you only have one disk drive, type in the following line and then press Return.***

```
Diskcopy from DF0: to DF0:
```

If you have two drives, place the Coverdisk in DF0: and a blank in DF1:, then type in this line instead:

```
Diskcopy from DF0: to DF1:
```

3 ***Follow the on-screen prompts and remember that the Coverdisk is the source disk and the blank is the destination.***

4 ***If you used the two-drive method, remember to rename the copy by clicking on its icon and pressing right-Amiga r.***

5 ***If you have two drives, you can also copy the disk from Workbench by dragging the Coverdisk icon over the destination disk's.***

6 ***Then place the Coverdisk in DF0: and reset the Amiga to boot it.***

Subscribers disk

Believe it or not, AS does still produce two disks every month. The second disk is exclusive to subscribers and contains many more Mbs of useful Shareware. Remember you can now subscribe for six months and should you at any time wish to cancel, you'll be refunded for any issues of AS outstanding.

This month's Subscribers disk has the additional AlphaSpell UK dictionary, the latest version of ShapeShifter (3.5) which is the acclaimed Mac emulator and an excellent file finding utility. Then there's Magic Menu, the essential menu enhancer, Plugged, a new CDDA player, TimePiece, a different dashboard type program and VersionWB, a new replacement for the version command. That's not all either. There's also Mathan, an Arexx controlled graph program and two excellent pictures for you to admire. The only way you can get the Subscribers' disks is to subscribe to AS, which will save you money and give you great offers too. For more information, call our Hotline on 01225 822511.



Don't delay, call our **Subscription Hotline** on ☎ **01225 822511** for details.

Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk – the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to the address below. Please do not send faulty disks to the Amiga Shopper offices.

Amiga Shopper Coverdisk
(insert the name of the disk),
TIB plc, TIB House,
11 Edward Street,
Bradford
BD4 7BH.


AMIGA USER INTERNATIONAL Top Rating 96%
PC PRO RECOMMENDED
PRODUCT cadd ENDORSED
CAD User RECOMMENDED
PC POWER PLATINUM AWARD
PC FORMAT SILVER
MacPower Best Value
Windows Plus Best Buy
BEST SELLER 95 WHAT PC?
Personal Computer VNU LABS Reviewer's Choice
AMIGA Star Buy
MACFORMAT Classic
BEST BUY WHAT PC?
SAMSUNG

News

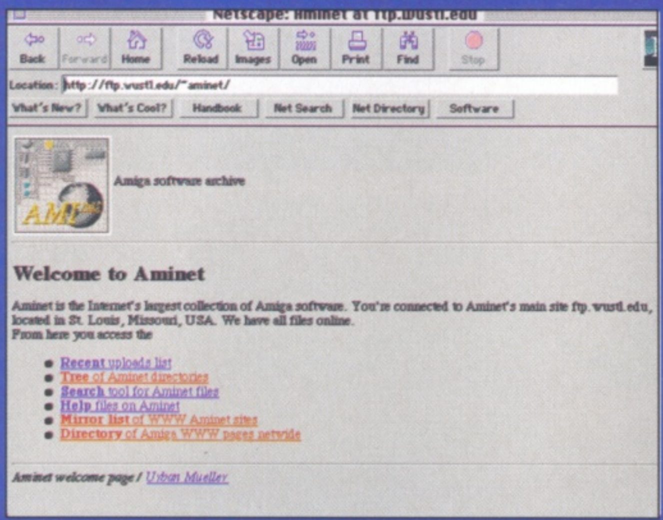
Success for the Aminet file archive, new products from Eyetech, Final Writer 5 and a new book for people interested in Lightwave.

Dedication is what you need

The 16th May 1996 was an important date for the Aminet file archive, it became the biggest in the world. With over 30,000 files, Aminet beats the next two largest archives, SimTel and Info-Mac into a cocked hat according to c|net's virtual shareware library.

But not content with merely having the largest archive in numbers of files, co-ordinator Urban Mueller is looking to hit the record books for largest size in megabytes too. At 5052Mb there is only one archive larger on the Internet and since it's an OS/2 archive it probably won't be growing at the same rate as our favourite source for software. In one week alone the Aminet saw over 400 uploads and the numbers of files downloaded from it every week are uncountable.

To celebrate the Aminet's record-breaking size there is the chance to take part in a competition and win a CD-ROM drive, the Aminet Sets 1, 2 and 3 and a year's subscription to the Aminet CD. There are also ten runners-up prizes of a year's susbscription to the Aminet CD. In order to win, all you need do is state exactly how many files there were in the Aminet archive on the 16th May 1995. You can send your entries via email to: aminet-server@aminet.org, or via snail mail to:
Schatztruhe GmbH
Aminet-Wettbewerb
Veronikastr. 33
D-45131 Essen
GERMANY



The Aminet file archive is now the biggest in the world.

> "In one week alone the Amiga saw **over 400** uploads"

White Knight Champions MacroSystem

Following in-depth discussions at MacroSystem's home base in Witten, Germany, White Knight Technology are proud to announce their exclusive distribution deal with the manufacturers of the V-Lab Motion card and Amiga clone Draco.

White Knight, who have been specialising in high-end, Amiga-based video systems since 1991, have been the sole distributors of the MacroSystem products since the collapse of Amiga Centre Scotland last year. But this new deal improves on their standing, giving the right to offer software and hardware upgrades and trade-ins as well as improved UK support for MacroSystem's customers.

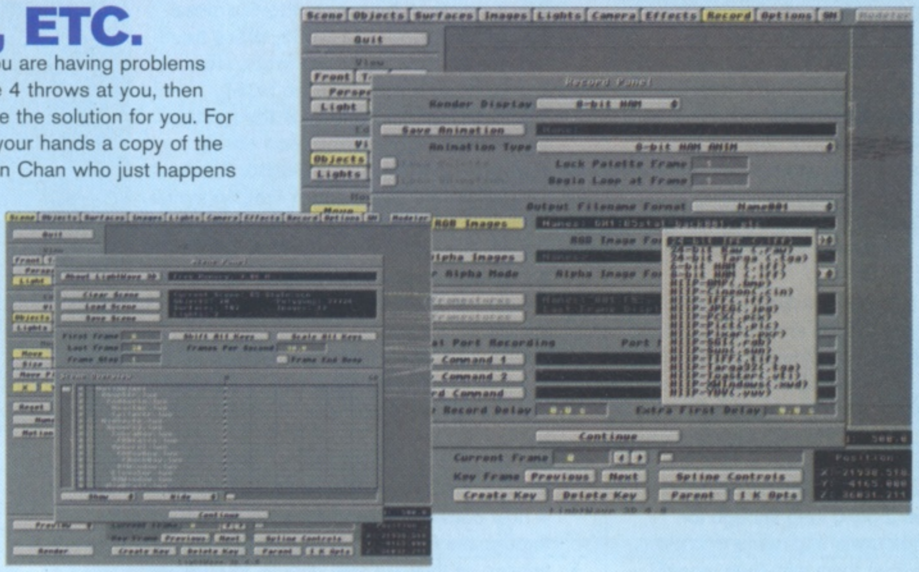
In order to devote the time, marketing and support needed for the Draco, White Knight will also be setting up a new company to deal exclusively with the successful non-linear editing workstation.

Existing owners of the MacroSystem kit will have their registrations forwarded to White Knight automatically, but those of you that haven't sent in their registration cards yet should send them to White Knight at PO Box 38,

Lessons in Lightwave

FX KIT 4 IK, DV, ETC.

If, like some of Digital Data Labs' customers you are having problems coping with all the new features that Lightwave 4 throws at you, then those happy chappies at Digital Data Labs have the solution for you. For a mere £34.95 including p&p you can hold in your hands a copy of the seminal tome "The FX kit for Lightwave" by Alan Chan who just happens to be head animator in Amblin's seaQuest DSV department. Of course, if you already know absolutely everything there is to know about inverse kinematics then you probably won't have had time to cover things like digital matting, elegant modelling and much more, so you should still buy it anyway. Digital Data Labs are on 01277 365249, or you can email them at info@ddlabs.demon.co.uk.



Get the most of Lightwave with the new book from Digital Data Labs

Ware, Herts. SG11 1TX in order to get the latest MacroSystem information and discounts on automatic upgrades.

Finally, White Knight are also slashing prices on 24-bit graphics cards with up to £144 off the price of a 1MB Retina Z3, bringing it down to an affordable £235 including VAT.

For more details on these price reductions and the registration deal for MacroSystem products contact White Knight Technology on 01920 822321, fax them on 01920 822302 or write to them at the above address.

Sound and vision from Eyetech

Continuing the video theme, Eyetech have announced that they are to re-introduce Microdeal's innovative VideoMaster PCMCIA. The VideoMaster will capture both sound and video at rates of up to 25 frames per second and save it out in the Amiga industry standard ANIM5 format.

Alan Redhouse from Eyetech reckons that the reason the VideoMaster didn't become more popular when it first came out was due to the low level of expansion most Amiga owners had attained. However, he feels the time is right to relaunch this interesting product owing to the fact that most A1200 owners now have the hard drive, accelerator and extra fast RAM required to make the best of this product.

Yes, the VideoMaster uses the PCMCIA port, possibly the most overcrowded slot on an A1200, but this is because the port was originally designed for application-specific hardware accessories like the VideoMaster. Items that were meant for constant use like hard drives and CD-ROMs should ideally be connected to other ports and, surprisingly enough, Eyetech can even supply you with an external quad speed CD-ROM drive that leaves the overloaded PCMCIA port available. That CD-ROM drive will set you back £149.95 and the VideoMaster costs just £79.95. For more details contact Eyetech on 01642 713185, fax them on 01642 713634 or email them at eyetech@cix.compulink.co.uk.

Three times a winner

With three new products this month Golden Image look like they're onto a winner this summer. The first is an A1200 trap door RAM expansion with 4Mb on board, upgradable to 8Mb, socket for a PLCC FPU and battery backed clock for just £79.95 plus £3.50 postage and packing. This offer is only valid for orders placed during July and August, while stocks last so get your credit card out now.

The second Golden Image item is the ConneXion card for any big box Amiga. ConneXion offers a fast 10Mbit Ethernet link with 10-Base-2 connectivity through a BNC connector. The card also comes with a standard AUI interface using an RJ45 connector for 10-Base-T connectivity.

The card autoboots from ROM, avoiding the need for drivers and is currently compatible with Amiga-based networks, although compatibility with Windows, OS/2 and Novel are currently being worked on. The ConneXion card is also fully A2065 compatible and thus SANA II compliant.

Finally, to avoid network bottlenecks, the ConneXion card has a 32k 16-bit on-board cache to boost performance and keep processor overhead low. The ConneXion card costs £185.

Golden Image's third new product is the Spider, an eight port serial card that supports speeds of up to 57,600 baud through all eight ports simultaneously. Designed to fit any big box Amiga, the Spider costs £299 including VAT. All these products can be ordered from Golden Image. Contact Navin Shah on 0181 900 9291.

Towers of Power

Blittersoft are getting in on the game of launching a new series of Amigas with their A4000TE. A tower A4000 based around the Eagle Tower kit, an official Amiga Technologies A4000 motherboard and your choice of processor board. All versions of the A4000TE are fully CE certified and even come with an Amiga Technologies seal of approval.

The bare bones versions come equipped only with the motherboard and 6Mb of RAM, leaving the dealer or customer to fit whatever processor card they wish. This is ideal for A1200 owners who have a fast accelerator because Blittersoft also offer a convertor that lets A1200 owners plug their accelerators into the A4000s processor slot.

Blittersoft will also be launching 040 versions that use the AT 040 card, ones equipped with faster 040 cards and even 060 models. They will all vary in price accordingly. Even so, the bare bones model will retail at a not unreasonable price of £1299.95 with the full 060 version selling for about £2100. In case that wasn't enough, you could always fit your poor little CD32 into a specially designed case just to match your new Amiga.

If you are interested in contacting Blittersoft about these systems they are available on 01908 261466 or via e-mail at bsoft@mag-net.co.uk.

Multi media

With its built in custom chipset and Advanced Architecture the Amiga is well equipped to deal with the area of computing known as multimedia. **Graeme Sandiford** *looks at some of the possibilities.*

Multimedia is perhaps one of the most commonly used technical expressions In an industry that is as buzz-word and techno-speak infested as your ever likely to encounter. However what does this magical word mean and why should you, as an Amiga-user, be interested? If you are an enterprising sort of person you may even be wondering, "how can I get in to this industry"?

If you say the word multimedia to the average PC-owner they will probably reflexively adopt a sullen expression and reach for their wallet. You see, most PC-owners usually here this word in a computer store as the assistant is explaining to them that if they want to do anything from playing games to running an encyclopedia they're going to have to fork out £200 for a soundcard.

You see a standard PC is incapable of making any kind of sound other than the most basic of bleeps without a soundcard – hell, you can't even add a joystick without one. Then, once he's warmed up, he'll casually mention the extra dosh for a decent graphics card, a CD-ROM drive and a decent controller. If you are dealing with a real pro he'll somehow explain why you need to buy a Pentium processor to display an animation a few inches square in 256-colours.

Ready-made

Surprise, surprise the humble ol' Amiga doesn't need half of all that "gubbins" to achieve similar results. Say what you like about Commodore, but they certainly knew how to build computers with excellent multimedia capabilities. One proof of this is the money Escom were willing to spend in procuring their range of multimedia add-ons for the PC, the other is their pride and joy – the Amiga.

Our wee beige friend was designed from the outset to be the ultimate multimedia machine. I'm sure that the Amiga's designers were patting themselves for some time after its

"A standard PC is **incapable** of making any kind of sound other than the most basic of bleeps"

MMExperience



This new-comer is intended for use by beginners and was designed to be as easy to use as possible. MMExperience is certainly that and it has already been used in several productions, both commercial CDs and Public Domain offerings.

While some of the basic features are missing, there is no other product that can offer as many features for the incredibly low price of £40. There is also a professional version of the program on the way with more features which should be worth looking at by both beginners and experts.

CanDo



CanDo, like Scala, has been around for some time now and has evolved into an exceedingly powerful and popular package. The latest version is CanDo3 which is arguably the most powerful multimedia authoring package around. Although unfortunately, it is a little flakier than the previous version with plenty of "un-documented features".

The program's most powerful features have to be its comprehensive scripting system. While you can still use the program on a more basic level for creating simple productions, you can roll your sleeves up and get your hands dirty when you have to. CanDo has support for variables, strings, arrays, ARexx, control over DOS commands and it even responds to system events like disks being inserted. With CanDo it's possible to not only create multimedia productions, but also build general applications.

Titbits

Credit where it's due

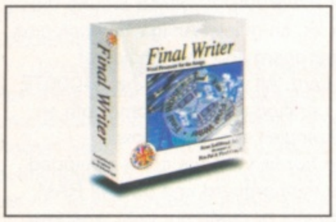
Last issue, we showed you pictures from the World of Amiga show which were taken by Kerstin Martens, but unfortunately omitted to credit her. Our apologies to Kerstin for this oversight.

F1 rev up

F1 Licenseware are offering a new service to both shareware authors and their customers. They want to act as a clearing house for funds directed at the authors and provide advertising for the authors products in their catalogue and possibly in magazines. F1 have been around long enough for Amiga owners to come to know and trust them with their money obviating one of the most often cited reasons for no-one registering shareware. F1 also have credit card facilities in addition to being able to clear cheques and postal orders giving a more convenient method of registering that most shareware authors will not be able to offer.

For more details phone Steve Bye at F1 Licenceware on: 01392 493580, e-mail him on: steve@f1lw.demon.co.uk or write to him at: F1 Software, 31 Wellington Road, Exeter, Devon. EX2-9DU. England.

Fantastic Five

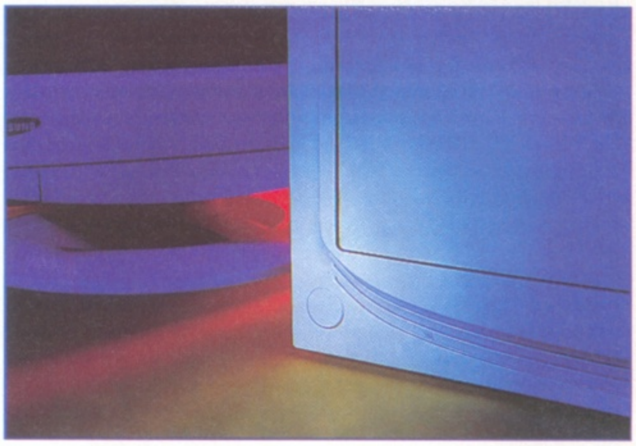


You can picture the scene in the Softwood headquarters: "OK Digita have brought out a new version of Wordworth, now's the time to strike." And strike they have with Final Writer 5. With loads of new features, including Autocorrect, Final Writer certainly looks set to reclaim the word processing crown.

Softwood are also offering those of you with an Internet connection the chance to make full use of the HTML saver with an invitation to take space on their web server for just £35 per year. Contact Softwood Products Europe on 01773 836781.

Siamese Update

Since our last report on the Siamese System from Hi-Q in AS59, there have been a fair few developments. Now any Amiga with a suitable SCSI interface can make use of the system. There have apparently been some problems with the new Surfin' Squirrel, although Hi-Q have been meeting with Hi-Soft to find a solution.



Anyone without a SCSI interface can get a serial version which can transfer files using a null modem cable. If you have the full system installed, it will automatically detect whether transfer through the SCSI or serial connection is the best option.

The Siamese System now allows you to set various options. As we reported earlier, you are able to control both the Amiga and the PC through the Amiga's keyboard and mouse. In addition, it is now possible to send printouts from the Amiga through the PC's parallel port. While this won't speed up printing as they are sent directly through, it does help integrate the two architectures further by alleviating the need for two printers or a switcher box. The same is true of the monitor which, thanks to custom hardware, will switch between the two displays – either manually or autmatically if you were to launch a PC application from the Amiga.

Installing the hardware into the PC is not too difficult. There are in-depth instructions and all that's involved is fitting a new card and then changing the serial connections from the external socket to the board. The software comes on a single PC disk and has two parts, one to be installed automatically on the Amiga using the Installer and one for the PC.

There has been a certain amount of misunderstanding of the system, which is not a PC emulator but a way of connecting the two machines. Both require a suitable SCSI interface for the full system, but it is a system that goes further than just allowing file transfer. It is almost like having two networked computers at your control from a single keyboard, using the same peripherals. The file transfer is what makes it tempting for the likes of DTP and 3D. For more information, call Hi-Q on 01525 211327.

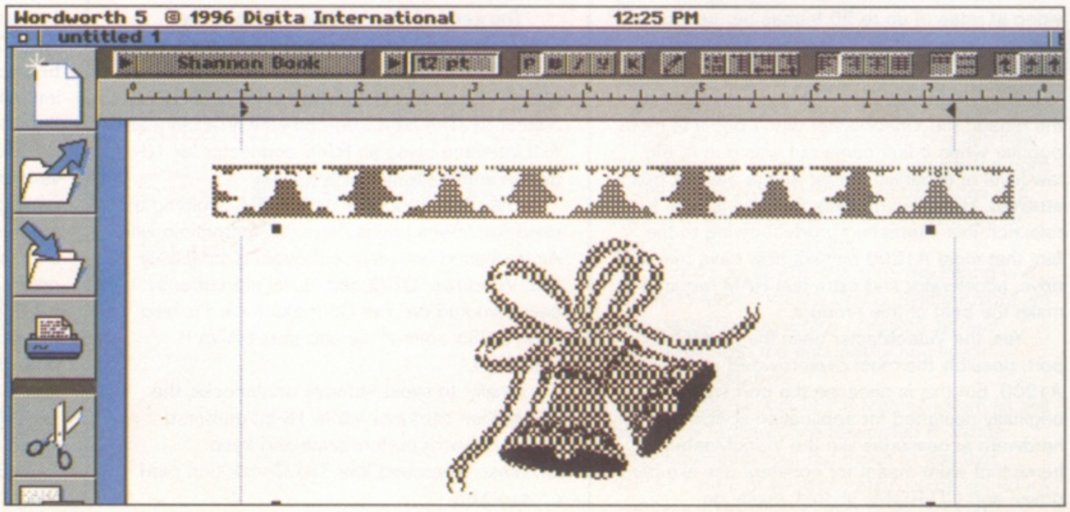
Wedded Bliss

Artworks have recently released a new set of professional clipart. This collection is based around a wedding motif and contains sets of images for you to use when preparing for the big day. Unlike most other clipart collections on the Amiga, this is not simply a set of PD images. Each of them have been created by professional artists as an original for the collection.

There are more than 100 images in the set and they come in EPS format for use in packages like PageStream or the new Wordworth. They are also supplied in ProDraw format for PageSetter and ProPage, etc. Because of the file format, it means that the images are fully scaleable without developing the "jaggies" as happens when you change the size of a bitmap image.

Artworks say that the pictures are in full colour, but will also print perfectly in greyscale. The collection includes motifs, strips, bells, doves, cakes, cupids, bride and groom, frames, church and party images. Although, it might be questionable as to whether you'd want to develop your final invitations and the like on your own computer, it would allow you to create some rough ideas to go to a professional with. And costing only £19.95 including P&P, this could work out a lot cheaper than hours of a professional's time.

On the other hand, if you are a professional, then this could save you a lot of work. For further details, you can contact Artworks at: 3 pond Side, Wootton, Ulceby, North Lincolnshire, DN39 6SF. Tel: 01469 588138 or email: artworksuk@aol.com. ■



Scala





This program can rightly be considered the granddaddy of all multimedia products. It has been around for years and has played a very important part in the development of the Amiga.

Not only can it be used to create multimedia projects it also doubles up as a rather good video titling system. As a result it has an incredible number of wipe and fade effects at its disposal.

Scala is a classic combination of powerful features and a simple interface and working methods. Scala MM400 is the current version of this popular package, but version MM500 is nearing completion and should feature even more useful features. While it lacks some of the powerful scripting features of programs like CanDo, it's a very flexible package and one that should appeal to both beginners and more experienced users.

ImageVision

Another new-comer to the world of multimedia, ImageVision takes a fresh new approach to creating multimedia productions. The program's interface is very graphical and quite intuitive to use – it looks a bit like a combination of a flow-charting program and a graphics package.

ImageVision also comes with a CD filled with useful resources, a guided tour and examples of what can be done with the program.

The highlight of the CD is the incredible artwork and backgrounds that are included as well as some tasty fonts. Unfortunately the program lacks some essential and basic functions which means that working with it is sometimes a bit of a pain.





completion and justly so. Multimedia is a complex resource-hungry area of computing. It essentially involves combining sound, visuals and different types of storage media.

In a way multimedia might be considered an attempt to mirror the real-world by providing us with the same sensory inputs. At the moment this obviously doesn't include senses such as smell and touch. The hard part is producing images, especially animations, and sounds that are of a sufficient quality to be recognised as their real world counterparts.

Sounds good

So what makes the Amiga such a gnarly beast of a multimedia machine? One of the reasons that people most often take for granted is the Amiga's sound abilities. As mentioned before, the standard PC can only manage the most basic of beeps or, if it's feeling particularly articulate, a couple of tones. The Amiga however has full 8-bit sound support built-in as standard and that includes older machines like the A600 and A500.

The Amiga's sound output is also in stereo which makes it suitable for playing back musical tracks as well as sound effects. What does an 8-bit stereo output sound like? Well if you have a good quality Hi-Fi or TV then you would be hard pushed to tell the difference between a well-produced music module and a CD track.

Graphically the Amiga is also well-endowed. Even though the A1200 and A4000 are over four years old, their natural (not augmented) graphics capabilities are still making peoples' jaws drop. This is thanks to the AGA graphics chipset which is found in both as standard. There are two factors that determine how realistic an image appears – the resolution and the colour-depth of the display.

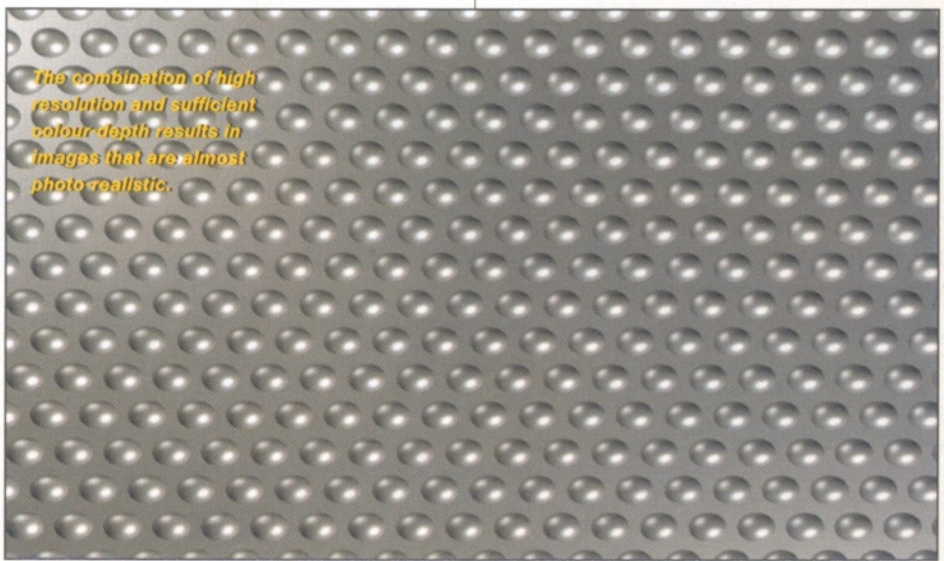
Good looking

The resolution of a computer image is measured not in inches or centimetres, but in pixels. These little squares make up the image that you see. The more of them that are on the screen the more detailed your image can be. The colour-depth of a display is the different shades of colour and intensity that each pixel is capable of adopting. This is measured in bits and determines how many colours are available to the screen. The more colours there are, the smoother the image will appear. When high resolution and sufficient colour-depth are combined the results can be truly photo-realistic.

The AGA chipset has support for resolutions up to 1280x512 pixels with even greater sizes achievable with overscan interlace options. The Amiga's colour modes can include anything from 2 colours to 256 in registered mode and a whopping 262,144 in its special HAM modes. In HAM8 the quality of an image can rival that of those displayed on 24-bit graphics cards. So once again the standard Amiga puts most other platforms to shame.

However this is only part of the story when comparing different multimedia systems. Displaying a still image is one thing, but animating several with any degree of fluidity and naturalness is quite another. It takes a serious amount of processing power to playback an animation that is of a high enough resolution to appear realistic at a reasonable speed.

To understand why this is let's examine what exactly is involved in playing an animation. The most basic of animation-playing methods involves loading a separate image for each frame. If an animation is in a relatively low resolution of say 320x256 pixels, each frame will contain 81,920 pixels. That means that each time a frame is displayed your machine will have to redraw each of these pixels. Nowadays things are much improved and there is a large choice



The combination of high resolution and sufficient colour-depth results in images that are almost photo-realistic.



There are a whole range of CDs that specialise in 3D objects, so you should have no problem finding the image that you require.

of animation formats that don't take such a primitive approach. They employ a variety of speed-enhancing techniques such as delta-compression. However animation remains one of the most taxing things you can try to get your computer to do.

Given the processor-intensiveness of playing animations you would expect the PC to be better at that sort of thing – wrong!

> "You've got the ultimate **multimedia** machine – what are you going to do with it?"

While a CPU-to-CPU comparison favours the PC, the Amiga has one or two tricks left up its sleeve. These take the form of its custom chipset. As with the graphics chipset the Amiga's Advanced Architecture (AA) enables it to perform better than you might first expect.

This system is based on the Amiga sharing its tasks between several chips. In a way this is similar to the way the new range of "super-consoles" work, but rather than having the chips perform one kind of calculation they can freely interchange tasks. This gives the Amiga an edge in performing many tasks including multimedia functions.

Multi-talented

So, you've got the ultimate multimedia machine – what are you going to do with it? Obviously that depends a great deal on the developers of Amiga software. But if you want to take matters into your own hands then take a look at the final pages of this feature where we show you how to get started on your multimedia productions.

Multimedia products have enjoyed a period of expansion of late and, if anything, are becoming more varied in their subject matter. However one of the most consistently popular areas of computing to benefit from multimedia technology has been educational and reference software. This is good news for everyone, but especially for parents, because multimedia software can breathe new life and generate fresh interest into subjects that might not otherwise be of.

There can't be many people who would prefer slogging their way through a musty old book when they could get the same information in a more entertaining manner. Learning should be all about experience and multimedia can enable you to experience a wide variety of sights and sounds.

Support Software











Giga Graphics
This four-CD set is a collection of over 10,000 images that can be used royalty-free on any of your own projects. There are a wide variety of images to choose from and most of them are high-quality photos.

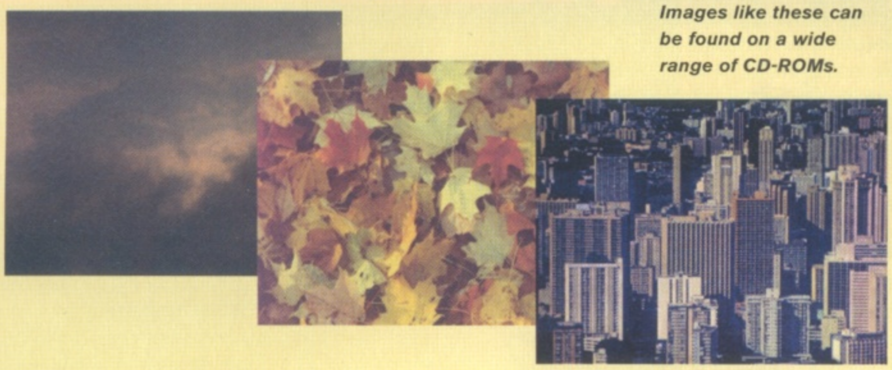
E.M.C. Phase 1
This superb CD is one of a series produced by E.M. Compugraphic who are now well-known for their fonts. However there is plenty more besides just fonts to be found on this disc. You'll also come across a selection of clipart alongside some pictures and some backdrops.

E.M.C. Phase 4: DTV Dreams
As the title suggests, this CD's contents are themed towards DeskTop Video. There are a great deal of similarities between DTV and multimedia and that makes this CD is an ideal companion for all of your projects.

World Atlas
This educational title is a good example of what can be done with a relatively simple and affordable package. The World Atlas CD was put together using MMExperience and it has been done very effectively indeed.

Syndesis 3D-ROM
This CD-ROM is responsible for one of the most popular trends in the CD market – the 3D object collection. It is an excellent example of how CD's should be organised. There is a very impressive directory alongside a detailed and helpful manual.

Resource management



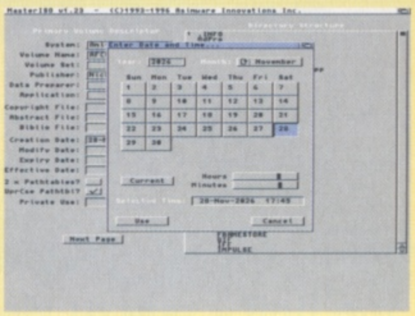
Images like these can be found on a wide range of CD-ROMs.

One of the more important aspects of creating good multimedia products is the raw materials that you use. If the resources, image and sounds, are not up to scratch then you will be severely disappointed if you expect the finished product to be any better. It's a nice feeling to have created something entirely by yourself, but if you don't have any artistic talent at all and think that orange text looks great on a purple background then you might consider getting some help.

Fortunately there is plenty of help at hand because the Amiga market is rich with such resources. What's more, if you don't feel guilty, you can raid PC and Mac material. All you need is the software and you can easily convert most types of files including images, sounds and even animations.

If you are a dab hand with a paint package or music sequencer then there is plenty of software on the Amiga that can help you create eye-catching graphics and thumping tracks. An image processor is a must as it can be used to create backgrounds, special effects and generate text effects. If you are good at drawing, a paint package can be used to add character to your applications and even animations. There's no need to keep things 2-dimensional either, there is plenty to be gained by adding 3D text, effects and animations.

Burn your own



As long as you have a gold disc (a writable CD) you should have no trouble finding a company to duplicate the CD for you. However up until a recently this has not been an easy or cheap thing to do. Nowadays there is a huge range of CD-ROM writers that are both affordable and 100% compatible with the Amiga. You should be able to get hold of one for somewhere between £600 and £1000.

All you need is the correct software, the right interface (most CD-writers are SCSI-based) and plenty of gold discs. For its ease-of-use and range of features MasterISO from Asim software is hard to beat. With it you'll not only be able to create CD-ROMs for use on the Amiga and other machines, you'll also be able to master audio CDS.

A good example of this are museums such as the London Transport museum. They make use of the Amiga's abilities to bring to life the things of the past.

Closely linked to education, another practical application of multimedia is simulation especially for training purposes. It is relatively easy to create a multimedia application that can simulate an almost infinite number of situations that will respond to the input from the user and then alter the situation accordingly. As proof of the Amiga's effectiveness at this kind of work, the Cleveland police force have purchased several Amiga A4000s to both train officers and provide vital information services.

> "The possible uses of multimedia are only limited by your **imagination**"

These are but a few examples of what can be done with multimedia technology and software and the possible uses of multimedia are only limited by your imagination. However to get the very most out of multimedia you will have to make some extra purchases. This is mainly because multimedia is so much more than the type of applications that you use – it also includes the storage medium you use and new and improved versions are always coming out.

The one piece of hardware that you simply must have if you are going to get anything out of most multimedia products is a CD-ROM drive. Most multimedia products are now shipped on CD-ROMs due to the amount of data that is needed. As drives are getting cheaper and cheaper you really should make purchasing a CD-ROM a high priority. Extra memory is always welcome and a big hard disk will come in handy too. Thus equipped you and your Amiga will be ready to enter the exciting world of multimedia.



ght ROM 3
lthough arriving on the scene uch later than the 3D-ROM, this ree-disc collection still manages be inventive and refreshing. contains objects and scenes for everal programs and there are ome images as well.

e Colour Library Vol 1
is CD contains a vast variety of different images. There are computer-generated images, fantasy art, photos and illustrations. The quality is a bit up-and-down in places, but on the whole the CD is quite good.

AGA Experience
This is a general purpose CD that is exceedingly well put-together. It takes full advantage of the AGA chipset and creates a pleasant working environment. The contents are also very good.

Special Effects Vol 1
Although not a particularly wonderful product, this CD is quite novel in its contents and is a good example of how certain subject matters are well-suited to be made into multimedia products.

Growing fast

As we have already mentioned, Multimedia software and particularly CD-ROM products are the fastest growing part of the Amiga software scene. More and more people have CD-ROM drives and many have expanded AGA machines with near incredible performance levels. This not only means that more people can make use of multimedia software, it also means that the products themselves can become detailed and more exciting.

Multimedia production is one of the most

exciting areas in the software industry and it's surprisingly easy to get into. Providing you have the right software and hardware the actual production costs are actually relatively low. CD-ROM-cutting software and hardware are both readily available and there are plenty of disc duplication companies who can happily duplicate Amiga CD's as easily as PC ones.

The thing that prevents most people from embarking on creating their own multimedia products is that they don't feel they have the necessary skills or knowledge. The truth of the matter is that they do. You don't need to be a master programmer or a design genius. Of course it helps if you are but nowadays there are a multitude of easy-to-use programs that make creating attractive and sophisticated multimedia applications a breeze.

Programs like, Scala, MMExperience, MediaVision and CanDo have been designed to make the process of combining graphics, sound and text as painless as possible. They are all object-orientated which means that all you need to do is place your objects, be they text, images or an animation, on screen as you want them to appear in the finished application. You then just have to assign an action to be taken after a certain event. Most of these multimedia programs use a system of stacks and cards to create the application. This works by having a screen, or significant change in that screen, represented by a card that is linked to the other cards that make up the stack, or program. Anyone who can competently handle a graphics package or DTP program should have no difficulty at all getting reasonable results from a multimedia authoring package.

As a bonus most of these packages, especially ImageVision and Scala, come with a healthy supply of useful files such as background images, fonts, samples, music modules and images that can be used as buttons. Thus armed even the most artisticly-challenged Amiga-users can turnout multimedia applications that are visually appealing.

Forward planning

If you know what it is that you want to do and plan it out well then you should have no difficulty producing a multimedia masterpiece, whether it's just to show your friends or if it's to become a top-selling CD-ROM. In most cases you won't even need to do any programming – not even typing a single variable. Most multimedia authoring packages can either compile your multimedia project into an executable program or as a freely-distributable display program.

If you have your finished project and want to distribute it on CD you'll need to create an ISO image and maybe even cut the CD yourself. An ISO image file contains a description of the CD that you want built. This can be created by a program like MasterISO, which can also be used to cut a gold disc. A gold disc can then be sent away to be duplicated.

If you can't afford the expense of a CD-ROM writer then you might consider contacting a PD library who create their own CDS. They are generally willing to lend a hand and if you can supply them with the hard disk with your files or an ISO image on, they will be able to create a gold disc for you. They are also the ideal people to contact about distributing the finished product. ■

Animations



Animations can enhance a multimedia production a great deal and can serve useful purposes too. Most of the better multimedia authoring packages have support for animations so you can create them in your favourite package and load them into the authoring system. One of the most common uses for animation is to provide transition effects, otherwise known as wipes, between two screens instead of jumping from one to another. Most packages have support for creating their own, but if your package doesn't there are plenty of packages that will enable you to create your own.

However when creating animations you have to be careful and bear in mind the machines that will be viewing the finished product. Not only do you have to take into account such things as graphics chipset, but also the speed of the machine's processor and how well the animation will playback.

CD-ROM Drives



The Jaz Drive: Big brother of the Zip, the Jaz drive can hold a massive 1Gb of data.



The Zip Drive: Capable of storing 100Mb per cart and it only costs about £200.



The Panasonic CD-ROM drive: Drives are getting cheaper all the time.

Even if you just want to use multimedia products, there is much to be gained from adding extra hardware to your machine and if you intend to create your own multimedia applications you are probably going to need to make a lot of modifications to your existing system. One of the things that surprises most people is the amount of data that dealing with multimedia generates.

A complicated project can easily take hundreds of megabytes of data and this has to be stored somewhere. This is why one of the first things you'll need if you plan on going into multimedia seriously is a big hard disk. The bare minimum that you should aim for is 1Gb and a 2Gb would definitely be preferable.

If you are not working solo, which is much advised, then some kind of removable storage medium is a necessity – transferring more than 60Mb of data on floppies is not most peoples' idea of fun. One of the more popular removable mediums is the Zip drive from Iomega which can hold 100Mb of data on each cartridge. The drive costs around the £200 mark and additional cartridges are available for £15. If you need even more storage capacity then the Zip's big brother, the Jaz may be the drive for you. It can hold up to 1Gb of data on each cartridge. The drive costs around £500 and the cartridges about £100.

As with most serious tasks some extra memory will certainly come in handy. The Amiga performs much better when it has some Fast memory and if you working on a multimedia project having enough memory to run two different applications at the same time is big help.

6Mb should be enough to get by, but you should really be looking to buy as much memory as possible.

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in The Net Files

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Photogenics 2

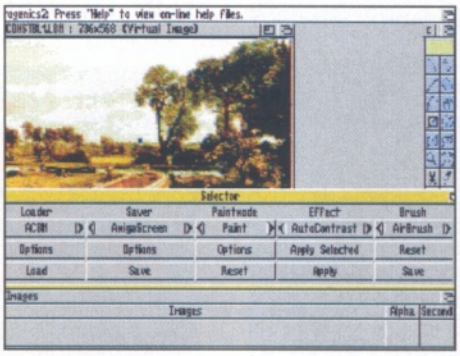
The program that stormed the graphics world has finally been refined and a new version released. **David Taylor** *finds out what's new.*

Normally, when a program becomes a success, the developers can't wait to get a second version out in order to cash in and make even more sales. But Photogenics 2 has been a while coming, which gives rise to hope that it has been well thought out and released as a genuine improvement on the original, worthy of the extra cash.

Before you can run Photogenics 2, you have to install it and choose what sort of gadgets will be used for the style of interface. The Gad-u-like (a gadtools type) option is for lower end machines, but is clearly inferior to the XIX higher resolution option. If you don't have the correct gadgets for the screen resolution installed, some windows won't adjust the screen width correctly so that you have to scroll the bar horizontally.

Déjà vu

When you then run Photogenics 2, you may at first be forgiven for mistaking it for the original. The picture bar at the bottom and the toolbar along the right look ostensibly the same. On closer inspection, you'll see that there have been some additions made to the toolbar, such as the warper tool, which allows you to grab a specific part of the image and stretch it out.



The Gad-u-like windows are more standard than the XIX, but don't look so flash.

...only to be brought out at Christmas.

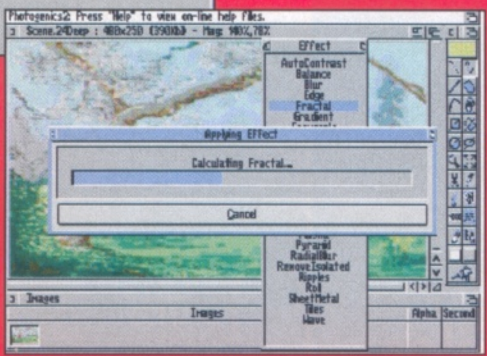
While the aesthetics of the package may have been retained, there have been some real changes made. The mode window has been expanded into two areas: mode and effects. The difference between the two is not that distinct. They both allow you to add a variety of changes to the image loaded in. As before, any changes are not made directly to the image, but to a layer above it. What you see, in effect, is the picture underneath through the semi-transparent layer of effects added. This means that you can delete the layer and its effects in order to uncover the original image. If, on the other hand, you're happy with the changes, you can fix them so that the layer becomes part of the image and can't be undone.

In addition to being able to save the new image, you can now choose to save any layers too, so that the effects you have added to one image can be imported over another image of the same size. This is useful if you have a set of images from one series that you need to add the same effects to. You can do so exactly with the layer format.

Some effects are obviously always going to more useful than others. The antique filter is still one of my favourites as I can actually find a use for it. In fact, all of the modes and effects will get an airing from time to time, although the frivolous Claudia one might expect to only be brought out at Christmas.



The On-line help is supplied via HTML documents viewed with AWeb.



Adding effects to images is simply a case of selecting them from the window and waiting. There are some occasional problems closing the window though.

Even better

Aside from the addition of new effects, there has also been an improvement of file format support, which was hardly poor in the first place. You can now do such things as load in Lightwave objects, which can be loaded at different resolutions and angles. To be honest, you don't get anything other than a rough idea of its shape, but it's a novel and interesting addition. There is also support for an old animation format, which I doubt will be of use to many, but what the heck. Datatypes are now supported and included on the CD.

The way of viewing images is the same as in v1, which means that you save the image out as

an Amigascreen or as graphics card format, just like a Picasso.

Similar to the effects and modes, the loaders and savers are chosen from a separate window list. These windows can all be opened from a special window, but there are a few glitches that need cleaning up. There are times, for example, when the program doesn't respond properly. Sometimes the effects window closes after selecting one effect, so that you have to re-open it every time you need it. At others, it is impossible to close a window even when using the close gadget. It even crashed a couple of times and hung a couple of times when I tried to shut the program. It does seem that there are some bugs to be ironed out, so maybe a patch will have to be released.

One of the major additions to the package is the ability to import virtual images. It's not surprising that this has been included, as the system requirements are now quite high. Photogenics 2 requires an AGA machine with 68020 and 4Mb RAM. Of course, as yet, Photogenics 2 only comes on CD-ROM, so you need a CD drive too. The plus of the package coming on a CD is that you get a set of additional support and example files. There are some files taken from the EMC Phase set of CDs and example pictures and some Lightwave objects. There are textures and backgrounds and basically a smattering of every type of file you might want to use.

Room for images

With the program installing to hard drive and using 2.5Mb of space, you do find that the 4Mb of RAM required to run the program doesn't leave much room for images. Even on a 6Mb system, many pictures couldn't be opened in true RAM. The virtual image facility does allow you to open images using spare hard drive space instead of RAM. The advantage of the virtual image inclusion is that it doesn't require an MMU as does Virtual Memory – the software which allows you to use hard drive space as memory with many software packages.

Although the system requirements are fewer, there are drawbacks. The virtual images are not as versatile as the normal images and cannot be resized as normal image windows. Also, in tests, using VMM (the normal software



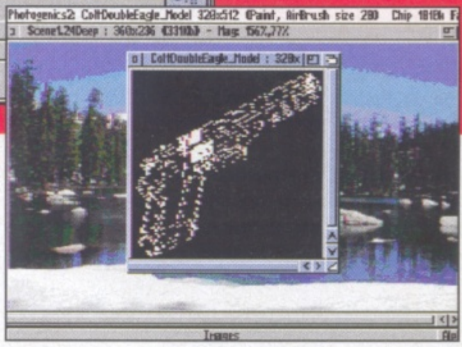
Only the top, fixed size image is loaded through Photogenics' internal Virtual Image feature. The others are loaded using virtual memory software, which is faster.

virtual memory) Photogenics 2 opened up images nearly twice as fast as it did using the internal virtual image feature. It is a useful addition, but people with a decent machine would probably be better off using VMM, or even better having lots of proper RAM.

In addition, because of the Amiga's poor stance with regard to outputting hard copy, there have been some essential third party pieces of software developed, namely Studio and TurboPrint. Photogenics 2 can not only print through the normal preferences printer, but also through those two packages, which is a useful feature. ARexx support has also been added to allow the use of macros to do batch processing and image manipulation with ease.

There is no printed manual for Photogenics 2. The documentation is supplied in the form of on-line help, which can be opened from the CD or installed to hard drive, taking a further 5Mb of space, so that you don't need the CD in the drive every time you need to access the help. However, unlike most on-line help, this one is not in the form of an AmigaGuide. The help has been created as a series of HTML documents – the type that you access on the World Wide Web.

In order to use the help, you can configure the system to use your own browser or install and use the AWeb one which the program uses by default. There is no effort in doing this as the



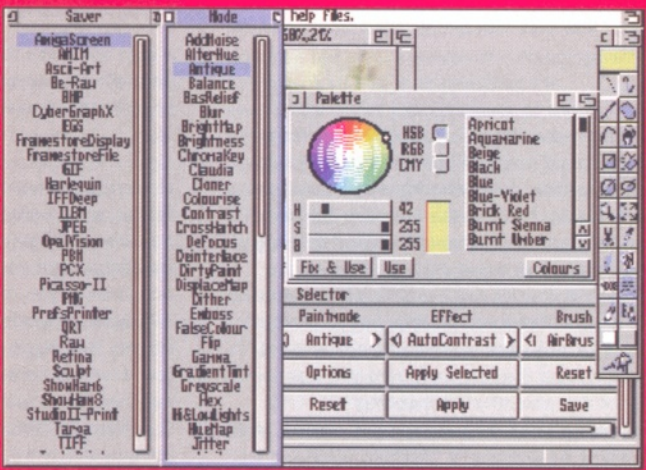
You can now use Photogenics to preview Lightwave objects – one of the many file formats now supported.

package is installed at the same time as the program and used automatically. AWeb has been used as it is the only real browser that doesn't require MUI. I can see that the idea of having a graphics package whose documentation is bereft of graphics would be unattractive, but AWeb does not do a great job of displaying text. The text is difficult to read and graphics are not loaded instantly. While pictures cannot be embedded in AmigaGuides as they can in HTML documents, it is possible to link to pictures and AmigaGuides are more accessible than the AWeb effort. I'm not saying that the documentation is terrible, but it does smack of being a good idea that didn't quite work.

Tad expensive

The full £100 price tag is a little steep, although it's nothing compared to the price of comparable software on other platforms. However, you can upgrade from the Lite version for £60 and from the registered version of 1 or 1.2 for only £45.

Considering the rave reviews that version one received, I'm sure that version two will prove popular. There have been some major advancements made. However, there are bugs that need addressing and, despite the claim of having features that aren't available on any other platform, this is still not Photoshop on the Amiga. Then again, it doesn't require several thousand Mbs of RAM to run. ■



This shows some of the windows open, including the palette, as well as the XIX type window, which doesn't work too well on normal Hi-res.

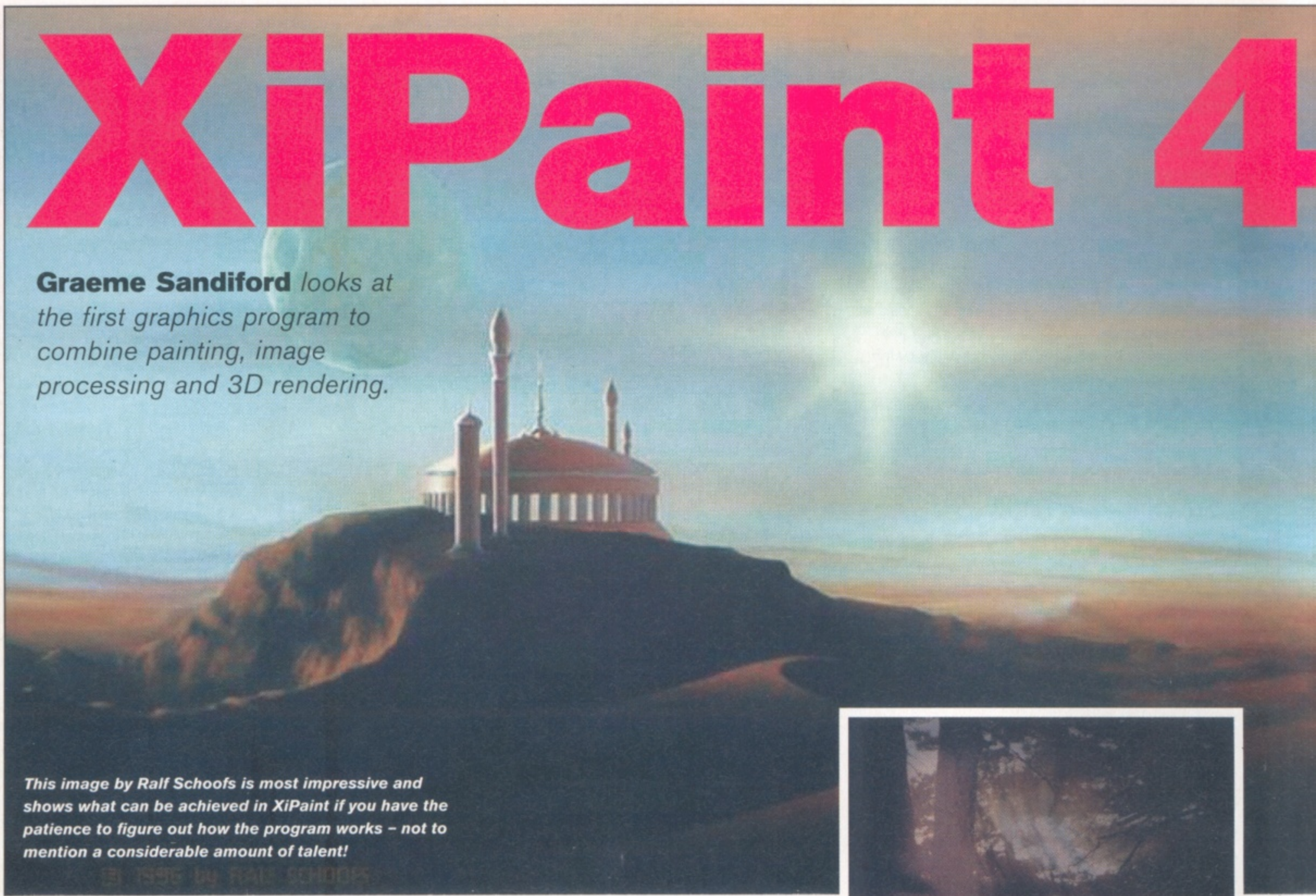
Photogenics

Price:	£99.95
Distributor:	Almathera
Contact:	0181 687 0040

Verdict: 87%

XiPaint 4

Graeme Sandiford *looks at the first graphics program to combine painting, image processing and 3D rendering.*



This image by Ralf Schoofs is most impressive and shows what can be achieved in XiPaint if you have the patience to figure out how the program works – not to mention a considerable amount of talent!

If there is one area of computing in which the Amiga reigns supreme, it's the realm of computer graphics. No other platform can boast such powerful graphical capabilities at anywhere near the same price, or has enjoyed such a variety of powerful and flexible graphics software. So many amazing graphics programs have started out their life on the Amiga and have lead the way for the development of even more products. Software like LightWave, Real 3D, ImageFX, Photogenics, DPaint and ADPro have provided the Amiga with every tool it needs to create all manner of stunning visuals.

It seems odd then that, until recently, there haven't been any programs that harness all of the Amiga's graphics potential. Programs like ImageFX and Photogenics have (excuse the dire pun) blurred the line between image processors and painting packages, but as yet there hasn't been a program that combines painting, image processing and 3D rendering.

XiPaint is the first package that has attempted to do so. This is a more difficult task than it might first seem. You see, there is a substantial difference in the way that most 2D and 3D artists approach their work – 2D artists are accustomed to more freedom when sploshing pixels around the screen, while 3D artists are generally more technically-minded and methodical.

These differences in working practices have to be taken into account when attempting to introduce 2D artists to the delights of 3D rendering. You have to be careful not to scare them off with an interface that has too many complicated options or is bristling with ambiguous requesters. XiPaint avoids this by providing a simple, no-frills interface that enables you to render simple 3D objects quickly and easily.

Exotic Shapes

You are given a choice of basic 3-dimensional shapes from a range of primitives that include spheres, cubes, dodecahedrons and some more exotic shapes. You can then choose a surface for your object such as marble, wood or bumpy plastic, as well as being able to alter the attributes of your object by making it translucent, shiny or dull. Once you've selected your object and set its attributes, you can then position it, your lights and the camera where you want and render it at a size of your choosing.

That's all there is to it, nice and simple, and the rest of the program's interface takes a similarly uncomplicated – if a little strange – but flexible approach. Like most graphics programs nowadays, XiPaint allows you to open several requesters and windows at once. As they are non-locking, you can use the features of one requester or window without having to close the others. This helps prevent the interface slowing you down by having to close windows that you may need a few moments later.

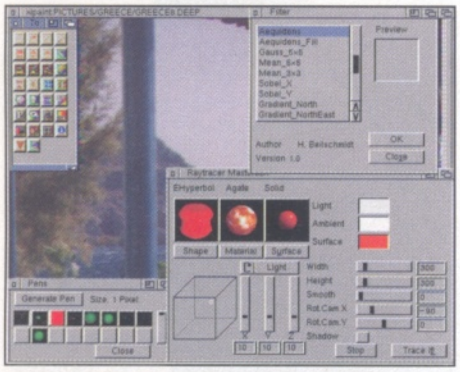


A very basic use for XiPaint's layers is creating fade effects and compositions, but a lot of complicated functions can be performed.

Although XiPaint is intended to be more of a paint package than an image processor, it still



One of the more welcome additions to XiPaint is support animation creating and editing – but this feature is not fully implemented yet.



XiPaint is, as far as we know, the only 2D program in the world that supports raytracing, image processing and painting.

has a generous supply of image processing tools to call upon. These include filters such as Aequidens, Brightness, Colour cycle, Contrast, Emboss, Gradient, Grayscale, Hue adjust, Inverse, Smear, Smoothing, SNN and several flavours of blur.

Thanks to the program's masking features, you are able to limit the application of a filter to a selected region of an image.

Unfortunately, unlike Photogenics and Deluxe Paint V, XiPaint lacks natural media emulation. This means that it won't be able to copy the way that traditional art materials, such as oils, watercolours, pencil, chalk and charcoal, interact with the textures of different types of paper. This is a real shame as this feature might have put XiPaint right up there with the likes of Photogenics and ImageFX.

Powerful

However, one of XiPaint's powerful features is its multiple layers facility. In computer graphics terms, layers can be likened to sheets of acetate placed on top of each other. The areas of a layer that have no paint on them will let the layer below show through. This enables you to have several independent elements that can be edited and viewed separately, then combined to produce a final image.

An added bonus is that if the project has been saved with its layers intact, you can return to it and modify the different elements separately. This might come in handy when you have finished an image or composition and then want to alter it, in which case you can change any element that has its own layer without affecting others. Unfortunately, it appears XiPaint is unable to save its layer with a picture. While the program's implementation of layers could hardly be described as intuitive or easy to follow, it is still an immensely powerful and useful feature. At the moment, XiPaint and TVPaint are the only programs on the Amiga that have support for this outstanding feature.

A welcome new facility that has been added to XiPaint since version 3.2 is support for animation. As the guide file points out, this is a new, and not yet fully-implemented, feature. So, while it is possible to create sequences of images, you can't save an anim file, playback 24-bit animations or load animbrushes.

As XiPaint is produced by MacroSystems, you might expect that it would have support for their excellent VLab digitisers and Retina graphics card. It doesn't. However, it does have support for a variety of different display systems. Everything from an ECS screen to CyberGraphX is catered for, so that even though the program operates in full 24-bit mode, whatever your system is you'll be able to view and save the images in the mode of your choice.

XiPaint 4 is supplied on a CD, so installation is easy as there is no disk swapping. And this also has the added bonus of leaving plenty of room for useful files and utilities. However, it is a real shame that there is no printed manual, as the program has some quite peculiar ways of doing things.

Sneaked a look

I am sure you'll agree that we've covered some very impressive features here and, if you have already sneaked a look at the score at the end of this review, you may be wondering why XiPaint hasn't scored much higher. Well, one of the biggest contributors to the program's low score is its lethargy. Even though XiPaint is faster than 3.2, it still leaves plenty to be desired when compared with its slicker competitors.

While the program has a whole range of powerful features, it is also sadly lacking in some of the most basic functions. The program has so much potential but simple things like changing the size of an image or cropping into section are either just not there, or are exceedingly well-hidden. This critical combination of a lack of important features and slothfulness severely limits the usability of XiPaint, and therefore prevents it from reaching its potential as a top graphics package.

But, judging by the images in a competition directory on the CD, it does seem that if people are willing to spend the time to get to grips with XiPaint's unusual working methods, it is possible to get some impressive results.

While XiPaint certainly won't appeal to as many people as programs like Photogenics, it may be worth a look for those who would like to use XiPaint's unique and powerful features. My advice to anyone thinking of purchasing a copy of XiPaint would be to get hold of a copy of Aminet 11 and try out version 3.2, as that is included free of charge on the CD. ■

XiPaint 4

Price: £99

Supplier: GTI

Contact: 0049 6171 85937

Verdict: 80%

Multiple layers



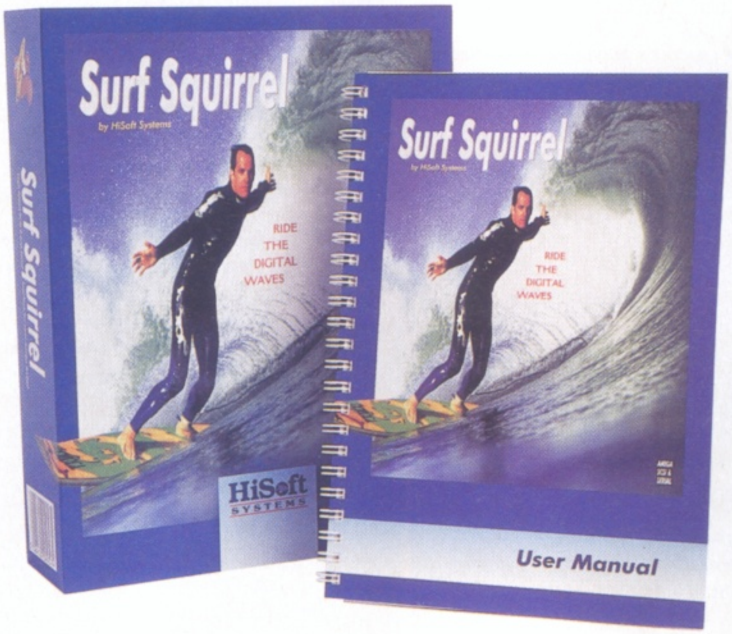




XiPaint's strongest feature is its support for multiple layers. In computer graphics terms these layers are like sheets of glass and this feature enables the creation and editing of independent picture elements which can then all be combined to produce a single image.

The Surf Squirrel

The latest version of the SCSi controller is ideal for fast and cheap Internet access.



Computers and cars have plenty in common, aside from them both being machines that is. While it may be true that you are unlikely to attract women or travel any faster by buying a big expensive computer, both machine's performances can be enhanced by the addition of various components and fine tuning.

Putting a faster engine in a car might make it faster, as will putting a faster processor into a computer, but if you want to make the most out of it, you'll need to adjust the rest of the car to work in harmony with it. Some A1200-owners think they can simply stick in a fast accelerator like a 1240 or 1260 and their machines will run as well as they can. Others will give up on trying to upgrade their machines because they can't afford such expensive pieces of hardware. In fact, they are both wrong – there is more to improving the performance of your computer than adding a new processor and you can improve your system without spending £600+.

SCSI technology

While it is true that your computer's processor is the main governing factor of the speed of your system, there is lot more that needs to be taken into account. One of those things is the connection between your computer and its peripherals and there is none more important than the one between your computer and its hard disk. Despite the popularity of cheap IDE drives on lower-end PCs, a substantial amount of Amiga-owners have made use of the advantages of SCSI technology.

SCSI, which stands for Small Computer Systems Interface, is a means of attaching devices to your computer. However, while IDE interfaces generally only support the addition of one device, SCSI interfaces enable you to link anything up to seven devices through a single interface. This can be anything from a hard disk or CD-ROM drive, to a scanner or removable cartridge drive.

All this could be yours – with SCSI



The Zip from Iomega is a removable cartridge system that is fast increasing in popularity. It has an almost magical ability to fit just under 100Mb of data onto cartridges that are only marginally bigger than floppies. Could this be the end of the floppy as we know it?



The Jaz drive is the big brother of the Zip and is also cartridge-based. However, its cartridges are a bit bigger – understandable when you consider that they can contain up to 1Gb of data! This drive is a superb asset for multimedia production.



This versatile drive from Panasonic can do something that most other devices can only dream of doing. Not only can it happily read CD-ROMs, it can also read and write to and from magneto optical cartridges. Again, this product is a multimedia blessing.

Despite the many advantages afforded by the SCSI interface, in the past they have been expensive and rare, especially for the A1200. Then the Squirrel came along and changed everything. The Squirrel is an SCSI interface that slots into the PCMCIA interface found on the side of the A1200 and A600. The great thing about, apart from being a complete doddle to install, was that it was inexpensive and didn't invalidate your warranty. It made a whole new range of products available to Amiga-users who didn't own big box machines.

The latest version of the Squirrel is set to take things a step further, as it now has support for SCSI II. This is the next version of the SCSI interface protocol and is faster than its predecessor, while retaining backward compatibility. This means that while their is a range of new hardware that takes advantage of SCSI II, you can still attach SCSI I devices to a type II interface. Indeed, you can even have a mixture of the two. With a theoretical maximum transfer rate of 40Mb/second, a fully-working SCSI II interface should be fast enough for most people's needs.

Trick up its sleeve

However, not content with simply keeping up with developments in the computer industry, the new Surf Squirrel has another trick up its sleeve – an extra speedy serial port. Serial ports have been around for longer than SCSI, and are an important part of most computer systems. Although PCs also use the serial port for attaching mice, the main use for the serial port is communication. The serial port can be used to send binary information to a device or even another, directly-linked, computer.

Despite the recent advances in communications technology, the serial interface still plays a large part in this area of computing. Many Amiga-owners want to surf the Internet with their machines and, for most users, this will mean attaching a modem to their serial port and connecting with a dial-up service provider.

When connecting to the Internet in this manner, time really is money, as the longer you are on-line the greater your phone bill will be. This is why you need as fast a modem as possible – it not only means you spend less time waiting around, it will also save you money in the long-run.

So not only does the Surf Squirrel give you a fast, flexible and expandable link with external hardware, it can also make surfing the Internet a lot more pleasurable, productive and less expensive. Well that's how things appear to be on paper, but how does the Surf Squirrel really shape up?

Physically the Surf Squirrel looks a lot like its predecessor, except that it's a little thicker and substantially wider to accommodate the extra circuitry needed for the serial port. The build quality of the unit is good and now features a longer SCSI lead which is most welcome. The SCSI lead has, as with the previous version, a standard 50-pin SCSI I connector which is larger than a SCSI II one. However, if your device needs SCSI II connector you can purchase an adaptor.

Squirrel rear

The serial port itself is located at the rear of the Squirrel and is a standard 9-pin D type. This kind of port has only 9 pins instead of the Amiga's normal 25, but this is okay as it has all the necessary connections and if you need 25-pin interface, for your modem or null-modem lead, a convertor can be bought from a large number of stores. The port can support speeds in excess of 115,200 BPS (reliable speed on an 020 A1200) which is quite impressive when compared with the average speed of around 19,200 for a standard A1200.

The majority of people are puzzled by that figure and often wonder why you would want a serial interface that operates at that kind of speed, when most affordable modems can only manage 28,800. Well, although most modems are labelled 28.8, this figure is for accepted protocols such as V.32 and others. When operating data modes they can reach speeds of 115,200, although not as reliably.

Another technical reason is that when calculating the speed your computer communicates through your modem, you can also take into account data compression. This will enable your modem to send two to four times the amount of data down your phone line – providing the recipient or your service provider supports this feature. This will only work effectively if your serial port can output either two or four times the standard speed of your modem.

A point well worth remembering is that the speed you can send information through your serial port depends a great deal on the speed of your processor. The speeds mentioned are for a standard 020 A1200, and an accelerated machine with, say, a 040 CPU can manage speeds of just under 57,600, which is half that of a 020 machine with a Surf Squirrel.

Stick it in

Installing the Surf Squirrel hardware is remarkably easy. You simply stick it in your PCMCIA port – gently, of course. The software installation is just as easy, and provides you with several options. As well as copying the Squirrel software to your hard disk, the installation script enables you to; copy the files necessary for CD32 emulation to hard disk, create CD boot disk, a CD32 boot disk as well as a hard disk boot disk. This should make it possible to play CD32 games, boot from utility CDs and boot from an external drive.

The Surf Squirrel's manual is absolutely superb and goes into mind-boggling detail about just about all the aspects of adding a SCSI interface to your machine. It covers everything you'll need to know about configuring a hard disk, CD-ROM drives, removable mediums and configuring your comms software to use its serial port.

The Surf Squirrel has achieved a major accomplishment in surpassing the original model. However, the question of whether existing Squirrel users should upgrade is a valid one. Essentially the answer is yes – if you are involved in shifting around tons of data, want to get the best out of multimedia products or are a serious Internet-junky. ■

Benchmark results

The first benchmark we performed is intended to test the speed of the SCSI connection by transferring large amounts of data in comparison with the Blizzard IV SCSI adaptor. This SCSI kit for the Blizzard 1230 IV and 1260 is likely to be the main competition for the Surf Squirrel when it comes to choosing a method of connecting SCSI devices.

We tried just about every combination – transferring one medium size file across the SCSI bus to an internal IDE hard disk, copying a large file, lots of small ones, copying files from a CD to a hard disk on the same SCSI chain and more.

The results turned out to be quite even, with the Blizzard shaving off a couple of seconds here and there. While the Surf Squirrel is a bit slower, you do get that super-duper serial port as well at roughly the same price.

Results table

5.38Mb anim file from CD to IDE
Surf Squirrel = 32.81
1260 = 32.28

5.38Mb anim file from IDE to SCSI
Surf Squirrel = 1:01.25
1260 = 1:00.47

5.38Mb anim file from SCSI to IDE
Surf Squirrel = 24.97
1260 = 21.5

8.5Mb folder containing 71 files from CD to IDE
Surf Squirrel = 56.03
1260 = 52.67

5.38Mb anim file from CD to SCSI
Surf Squirrel = 31.02
1260 = 29.44



Anybody who is anybody has a CD-ROM drive. Not only are CDs nice and shiny, they contain tons of data and can also be used to playback video-quality MPEG sequences with the right hardware. CD-ROM drives are getting cheaper all the time and are now a real 'must-have'.

Surf Squirrel

Price: £99.95
Supplier: HiSoft
Contact: 01525 718181
Verdict: 92%

Graffiti

David Taylor *examines a little black box that can give any Amiga access to 256 chunky pixel mode.*

It's hard to imagine that a little black box that fits onto the RGB output of any Amiga model could actually be a powerful video card, but that's exactly what this Graffiti "card" is. It allows a 256 palette on any Amiga, although higher resolutions are only available on AA machines.

Before some clever programmers set out to prove it wrong, it was always held that the PC game Doom could never be created on the Amiga because it lacked this all important chunky pixel mode. Bitplaned graphics, which are the sort that the Amiga is restricted to, are much slower to process than chunky graphics. With chunky pixels, animations and games like Doom clones, which rely heavily on quickly processing graphics, are much faster.

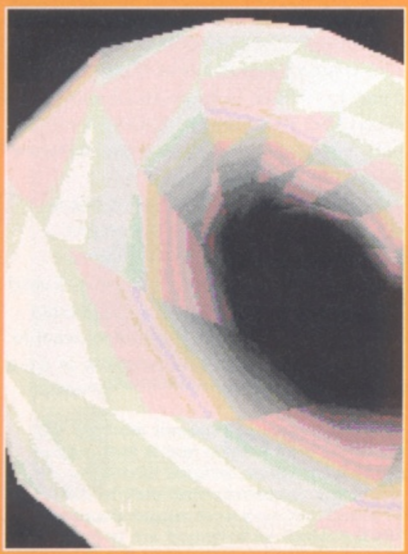


There are executable pictures that show you how well your Amiga can display pictures using the new modes supplied by the Graffiti – without it they appear very corrupted.

What on earth?

The manual for the Graffiti begins with a warning that it has been written not by a programmer, who are notorious for creating baffling manuals, but by a hardware designer. The result is that after a few paragraphs of reasonable introduction, you are thrown into a mass of jargon that is for programmers only.

Spinning gorraud shading demos are de rigeur for chunky pixel graphics.



With chunky pixels, animations and games like Doom clones, which rely heavily on **quickly processing graphics**, are much faster.

Thankfully, the majority of users won't even need to read the manual. After all, installing the box is simple, just plug it into the RGB output and then plug the monitor into the back of the box. For displaying the output, the monitor needs to be a standard 15Khz model, like the 1084. Faster displays are available with the AGA chipset and with accelerators with burstmode fastmem.

With the box plugged in, you need to make sure that your screenmode is set in the preferences to one of the following resolutions: 640x256 (AGA only), 320x256, 160x256 and 80x256. The number of bitplanes needs to be set to a maximum of 4 (16 colours), otherwise the standard Amiga bitplanes are used.

Plug and play

So, after plugging in and setting your standard preferences, what can you do? Well, software needs to be written specifically for the Graffiti, so the use and appeal of the card is somewhat limited by the amount of software available. With the card comes a set of sample software that has been created already. On the serious side,





The one utility that you can try out is a picture viewer, which displays this 256 colour image easily, even though the preferences of the screen are set to 16 colours!

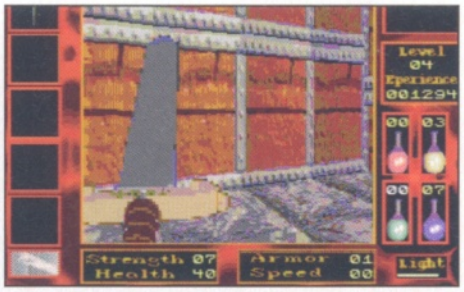
there is a picture viewer which has only German documentation. This gives great results but, at the end of the day, is only a picture viewer. Not a big puller for AGA owners. There are also drivers for the excellent ShapeShifter Mac emulator but, of course, to make use of these external viewers, you'll also need to have a graphics card.

There are also lots of demos and animations supplied too. Some of these are exceptional. OK, so there's only so much fun to had by watching plasma effects and pictures rippling, but they do look great. Incidentally, if you take a look at any of these demos without the Graffiti card plugged in, all you will see is some crazy grey animation, which looks like a corrupted picture.

There is also a game included, which we'll skate over, but is worthy of a mention. Trapped shows the real capacity of the Graffiti. Running at 1x1 pixels in 256 colours at 192x192, the action is so smooth and slick it puts many PC games to shame. OK, it's a game, but it shows the promise hidden in this little black box.

To help spread the software and popularity of the Graffiti, a Graffiti support CD is to be published every 3 to 6 months. Programmers can submit their routines for free and the CD will be sold cheaply for $7, around £5. To encourage programmers, they get a new three month warranty for their board every time they publish a program on the CD, as well as a copy of the CD itself. This means that the card will be replaced swiftly, regardless of its age, in the event of failure. Not bad, eh?









Games programmers will leap at the chance of writing games like this one, which show the quality of Doom clones you can create using the Graffiti's chunky pixel graphics.

Who is it for?

In order for the Graffiti to gain mass market usage, it needs masses of quality software support. But to get commercial developers, it requires a large user base. It's a bit of Catch 22 situation. The CD though, should convince programmers to get the Graffiti and develop software, which in turn will lull users into buying the card. It's a shame that user confidence is nowadays left to be fanned by shareware developers, but that's the sad reality.

Hopefully, more programmers will be interested in getting the Graffiti for themselves, so they can write for it out of their interest in the new fast pixel mode. Then, other non-programmer users will also end up wanting one too. It is a neat box, but hasn't got the support it needs for 'ordinary' users to be tempted. Yet. The documentation needs reworking and the software supplied needs translating and tidying up – icons and proper directories, maybe hard to set up, but they make the appearance much more professional. ■

Graffiti

Price: £69.95
Supplier: Power Computing
Contact: 01234 273000

Verdict: 82%

GlidePoint

Over a decade on, still no-one has come up with a credible alternative to the mouse. **Nick Veitch** *had a go with the new pointing tool for the Amiga, and got his fingers in a muddle.*

The mouse was originally developed by Xerox, as far as I can remember. They wanted a simple tool that anyone could use with no knowledge of computers at all. Obviously the technology was immediately borrowed by others, such as Apple, as a way of driving simple-to-use Graphic User Interfaces.

But did they get it right first time? Over a decade later can't the original design be improved upon? Many have tried, and poor, undernourished reviewers have struggled long into the night trying to get to grips with all manner of strange pointing devices, including lightpens, mousepens and all sorts of other paraphernalia and nonsense.



The miniature Glidepoint should fit onto the untidiest of desks, but you need tricky fingers to use it.

Touch sensitive pad

So it was with a certain amount of trepidation that I offered to try out the GlidePoint. The first thing that is different about the GlidePoint is that there are no moving parts – just a touch sensitive pad which responds to the position of your finger. Although the technology is not terribly 'new' (it has been in use on a variety of Portables) it is new to me, and to the Amiga.

The pad, having originated on the PC, is a serial device, and indeed, one with the wrong plug on the end. Power do supply the unit with a converter though, and the necessary driver software. The Amiga driver runs as a commodity, so it should work with all system-compliant software, but not with any self-booting games. The main disadvantage of this is that your serial port is tied up.

My first impression was that the pad would not be big enough to be of any real use. I was wrong. In fact, one of the very first things I had to do was reduce the sensitivity of the pad to prevent the pointer from whizzing all over the place. The other initial surprise was that the GlidePoint surface is not spongy and squidgy, as I had imagined it would be, but pretty damned solid.

Space Man

One of the obvious advantages of this control method, and the reason for its use in portables, is that it doesn't require nearly as much space as a mouse. The pad itself is about 8cm by 6.5cm (or 3" by 2.5" for you pre-decimalites), so you should be able to find a place for it, no matter how untidy your desk is.

It is not really heavy enough to stay exactly where exactly you put it, but I found it quite natural to hold the unit between thumb and second finger while using my index finger to move the pointer.

Skinny and nimble

The only real problem comes when it is necessary to hold the buttons down and move the pointer. You either have to have very skinny and nimble fingers, or some extra help from some workbench commodities. David Taylor told me to dig out a copy of the PD utility MenuStay, which forces menus to stay on the screen even after the right mouse button is released. And I have to say, it works remarkably well.

Left mouse button clicks are emulated by simply tapping your finger on the pad. It works surprisingly well, assuming you remember the pad is touch sensitive and doesn't require severe physical force.

The only real remaining problem is paint packages, or anything else which requires the left mouse button to be held down for any length of time. I don't know of any way of emulating this and, needless to say, moving one finger around the pad while holding a button down with the other is not altogether conducive to accurate drawing.

Aside from that, the Glidepoint is a highly useable mouse replacement, which is of extra special benefit to those with limited deskspace. I think I will be sticking with my trackball, but others may prefer to differ. ■

Glidepoint

Price:	£59.95
Supplier:	Power Computing
Contact:	01234 273000

Verdict: 68%

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Speed up your AMOS programming with the AMOS Pro Compiler 2 from Europress, which F1 Licenceware have re-released for a limited period. If you want to know more about the program, we ran a review of it in the April 1996 issue, where we gave it a respectable 87 per cent.

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- **Microbotics VXL** RAM-32 (includes 2Mb of 60ns FastRAM) for Microbotics VXL-30 68030 accelerator, compatible with A2000, A1500, A500 or A500+ computers, £120 ono. Phone ☎ 01704 834335, ask for Nick.
- **SIMMs, 4x1Mb** for A4000 etc., £15 each or £50 the lot. ☎ 01277 623091.
- **Kindwords 3** word processor for A600, complete in original box, £16 including postage. Maxell MF2 HD, 2Mb floppy disks, 10 in sealed box, nine unsealed, £5 including postage. ☎ 01858 463608.
- **WB3.1 for A3000,** use 256 colour Workbench with graphics card etc. only £60 ono. Bob ☎ 01444 247223.
- **A3640 for sale,** turn your 4000/030 into a 4000/040 work station for only £300. Bob ☎ 01444 247223.

● **Amiga 1200**, 7Mb RAM 348Mb hard disk 50MHz GVP A1230-II accelerator with MMU HiQ's PowerStattion with CD-ROM, Epson LQ100 printer, Roctec Roclite external disk drive, £1,200 ono. Call Paul on ☎ 0181 841 7813.

● **Amiga 1200,** new condition! Complete only £180, monitor £100, prices can include postage and would send cash on delivery if you prefer. Call ☎ 01322 664136 (evenings please).

● **Amiga 4000/030** 6Mb RAM 255Mb HD, 68882 FPU, S-VGA colour monitor, external floppy drive, loadws of software including DPIV, DICE, Imagine 3 and games, £900 ono. Call Neil on ☎ 01255 870079.

WANTED

● **Datel genitizing tablet** for use with Amiga 500+ (Tabby or Glidepoint not suitable). Would be prepared to swap for Amiga software. Call ☎ 01457 862189.

● **A4000/040** in good condition with manuals. Reasonable price paid. Mr. R. A. Whitehead, 21 South Drive, Shortstown, Bedford MK42 0UD.

● **V-Lab Motion** for Amiga 4000, price dependent on age and version. Call between 9am and 3.30pm weekdays or any time weekends. Call ☎ 01443 776515. Ask for Jeff. Also wanted LightWave videos.

● **Wanted: 2.5-inch IDE** hard drive cable. Needed urgently! Call Alan on ☎ 01294 276396.

● **Flicker Fixer** and CDTV software required for an A1500. ☎ 0171 263 8882.

● **A4000 keyboard**, must be white, no A3000 keyboards please. Must be mint. Can part exchange my A3000 keyboard if needed. Call Dave on Blackpool ☎ 01253 595300 any time.

● **Wanted: Digita Organiser**, Datastore, TurboCalc, complete original versions with manuals only please. Best price paid. Call any time ☎ 01206 210857.

Warning

No trade advertising will be accepted for this section. Some people are still trying to sneak them in and we will weed out any we find. This includes PD advertising. We will also remove any that appear of dubious legality. Pirated software is illegal and sales within these pages will not be tolerated. Please do not attempt to abuse this service.

● **Quarterback Tools**. Please ring ☎ 01737 779540, or e-mail godman@mbox.gaia.com.co.uk

● **Wanted extremely urgently!** Hint books for Eye Of The Beholder 1 and 2. Good price paid. London area. ☎ 0181 669 1247 evenings. Situation critical.

● **Help A500+ owner,** 1Mb, needs info on HDs and CD-ROM drives. What can I attach? Contact: Paul, 1 Clydesdale Path, Borehamwood, Herts WD6 2SE. I'm on the dole and skint!

● **Wanted for Amiga** A570, CD-ROM operating manual. Please ring ☎ 01202 881421, any time.

● **Enterprising dealer** to sell me a printhead for my Nakajima AR40D printer. I've been everywhere man, but no joy! ☎ 01507 338044.

● **Can anyone** in the Sheffield/Chesterfield area with a CD-ROM help me get mine to work. I don't know what to try next. David on Sheffield ☎ 0114 274 6357.

● **A4000 68040** processor card and 040 chip wanted. Will pay around £175. Phone David on ☎ 01277 210197, Monday to Friday, 3pm to 8pm only.

● **Urgently required:** Datascan Pro software (or similar scanning software) for Zydec Handy Scanner (circa 1991). Sensible price (or swap PD?). Write to Sean Kennedy, 41 Larwood, Worksop, Notts. S81 0HH.

PERSONAL

● **27-year-old** owner seeks local users (preferably 18+) for the usual Amiga-related things and nights out on the town. Mark, Eastview, Fernleigh Road, Mannamead, Plymouth PL3 5AN.

● **Serious Amiga contacts** wanted! Write to William Redhouse at: Tarka, Kirkby Malham, Skipton, W. Yorks BD23 4BX. Worldwide penpals accepted. I look forward to your letter. Please write in English.

● **West Yorkshire** Amiga users. Monthly friendly meeting every last Tuesday of each month. Join fellow Amiga users. Tutorials given. Ample parking. Huddersfield area. Absolute beginners welcome. Call Tony ☎ 01484 460888.

● **LightWave animators/** modellers wanted to work on exciting projects. Phone Bob ☎ 01444 247223.

FANZINES/BBSs

● **Techno-1 BBS**. Open 10pm till 6am every day. Red Dwarf file and message areas. Large RPG/adventure files. Call ☎ 01793 610632. SysOp: Grimbo.

● **Visions: a new sci-fi,** fantasy, horror zine needs stuff. Fiction, artwork etc., all genres considered. Send S.A.E. for full details. Sean Kennedy, 41 Larwood, Worksop, Notts. S81 0HH.

● **The Domain**. Amiga only PD fanzine. Issue one out now. Send S.A.E. for subscription details to: Domain, 6 Saxon Court, Kingsway Gardens, Andover, Hants. SP10 4BU. Note: free, except for postage.

● **Visions issue one,** out now. Sci-fi, fantasy, horror, fiction zine. Only 50p (+S.A.E.) from: Sean Kennedy, 41 Larwood, Worksop, Notts. S81 0HH. Contributors also needed for future issues. S.A.E. for info.

● **Micks Cupboard BBS,** 24 hours, seven days a week, Amiga and PC, 9,600bps, files no ratios, friendly SysOp. ☎ 01702 303290.

● **The Big Squeeze BBS,** ☎ 01563 532882, speeds 2,400 to 28,800, latest Aminet CDs, 2.4Gb, running Xenolink Pro software, friendly SysOp, weekends only, 24 hours, loads of file areas, new BBS.

● **Guru medication,** BBSI, Fido, Aminet. Over 1,000+ files on-line. Speeds up to 14,400. Fido points available free of charge. Call ☎ 0181 401 2502, 24 hours. Node 2 from May 1996.

● **Visions**. A new SF/fantasy/horror fanzine (printed) needs fiction and artwork for issue one. Send S.A.E. for full details to: S. Kennedy, 41 Larwood, Worksop, Notts S81 0HH.

● **No Limits BBS** 01293 413668, v34+, 1.2Gb, Xendrix Pro software, very friendly SysOp, free call to other Eurobell subscribers, complete Fidonet backbone, many other networks, perfect for points. Binarynet HQ!

● **Echoes BBS**, Camberley, Fidonet, Sportsnet, plus many more. Always the latest Aminet CD-ROM online. Free pointing all networks, Xenolink Pro software, friendly, helpful SysOp. All welcome, 24 hours 01276 62099.

● **Entity** is a new diskmag that aims to keep Amiga alive by getting you creating. Issue one and two ready. Contact: Jono, 25 Denness Place, Llandudno LL30 2UX, for more info.

● **New Amiga** diskmag. £2 for two disks on AMOS, Imagine, PD and more. Jono, 25 Denness Place, Llandudno, Gwynedd, Wales LL30 2UX.

● **Mogsy's BBS.** Contact Anthony Morris on ☎ 01772 496590. Amiga only! Over 1,000 files on-line and CDs to choose from! Speeds 2400 to 28,800. 24 hours. Call today!

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Amiga answers

RKM Manuals

Now that AT have taken over Amiga development where can I get the latest versions of Autodocs, Developer Tools, V3.2 includes from? (I have the includes etc, that come with the full DICE C package). Also, are there any plans to publish Amiga ROM Kernel reference books on OS3.x and, if so, would Addison Wesley consider publishing a book on the OS3 extras so that we can keep the OS2 ones. Whilst on the subject of the ROM Kernel manuals, how about a tutorial explaining how to get the most from them? They're full of good info but hard work, to say the least!

Shawn Marston
RAF Lyneham

The change of offices, recently proposed sale of AT to VIScorp etc, seems to have temporarily thrown a spanner in the works as far as obtaining the latest headers here in the UK. But if you contact Amiga Technologies in Germany (fax no: 004 962 5802179) they should be able to help. Addison Wesley have no plans for releasing fourth editions of the RKM manuals at the moment, despite the fact that the current manuals are long overdue for an update. The idea of a separate OS3 enhancements issue would make sense for existing users, but I've no idea whether it will happen. You don't need tutorials on getting the most from the Addison Wesley manuals – just lots of time. Everyone finds them hard going for the first couple of years but, once you're familiar with the easier topics (the Intuition chapters etc), the rest will slowly fall into place. The Amiga's OS is very consistent and this also helps – once, for example, you've learnt how to use one device properly, then learning about other devices becomes easy because they are all handled in much the same way. Having said that – if enough people asked for a tutorial on using the RKMs we'd obviously listen and respond!

Paul

DICE scanf() Problem

When I compile the following program (see Listing 1) using dcc -lm test.c, the compilation proceeds without any hitches. But when I run the program, error messages appear saying – scanf: %e,E,f,g,G, only 'l' double format currently supported. All output values are printed as zeros. By the way – any advice on a C book as Total Amiga C is not available.

David Bateman
Huntingdon

This is due to restrictions within DICE's scanf() function but it's easy to fix. Just change your float variables to doubles, use %lf instead of %f, and then compile using the same... DCC -lm test.c... command you've been using. Listing 2 shows the various changes that need to be made! Unfortunately, whilst there are hundreds of good books on C around, there are few that deal specifically with the Amiga. The Abacus 'Amiga C For Beginners' is now both out of

The experts at hand to help you...



Whenever you try out something different with your Amiga, or buy a new piece of kit, you might come across problems that you don't know how to solve. That's what these pages are here for – to guide you through your difficulties and get you using and enjoying your machine to the full. We've got a great group of experts to hand with their own in-depth knowledge in special Amiga areas. So put them to the test, and send your queries in.



Paul Overaa is our Operating Systems programming expert. He has written several books, including: Mastering Amiga Assembler, Mastering Amiga ARexx and Mastering Amiga C. When he's not drinking red wine or wind surfing, Paul can be found making music and designing programs on his Amiga.



Gary Whiteley is our expert on video and graphics. He regularly produces work for films and TV. Gary has also written several books on his favourite subjects – among them is Amiga Desktop Video, published by Future Publishing (call ☎ 01225 822511 to order a copy). Gary also regularly reviews new products for Amiga Shopper.



John Kennedy is our hardware and music expert. He has written Supertests and features alike for Amiga Shopper in the past – this month he's put together the accelerators Supertest starting on page 16. He's also teaching everything you need to know about CanDo on page 46, and he previews a brand new program – Octamed Studio – on page 25.



Larry Hickmott is our DTP and word processing expert. He produces his own DTP magazine called Em and has written several books, including *The Wordworth Companion* for Digita and Future Publishing's books division.

Answers contents

If you're looking for a particular problem, this handy index will help you find the answers you need:

print and, in terms of contents, rather out of date. Cliff Ramshaw's book is also no longer available. Total Amiga C, incidentally, should be going to press some time in the next few months but, in the meantime, Amiga Shopper's Question & Answer section should be able to help you along.

Paul

MuchMore

After reading about the missing library problem sent in by Kenny Codrington (issue 59), I'm hoping you can provide similar instructions to help me in trying to use MuchMore. I did a check using a Shell window using...

    dir workbench; libs

but received a message saying 'object not found'. I then tried the ASSIGN LIST command you suggested but couldn't see a 'libs: workbench:libs' entry.

Mrs S Hall
Derby

The reason for the error message when doing the workbench directory listing is that you have used a semi-colon instead of a colon. To list the libs directory you would normally need to type...

    dir workbench:libs

Unfortunately, these instructions wouldn't have worked on your machine. From the printout that you provided, it's obvious that your machine is set up differently to the one Kenny Codrington was using. The hard disk's Workbench partition is called System3.0, so the command needed for listing the libraries on your machine would be...

    dir System3.0:libs

or just...

    dir libs:

The MuchMore text scroller uses the graphics and intuition libraries (which you will not see listed because these are stored in the Amiga's ROM). It also uses the arp library and I'm certain that you'll find that this is the one that is missing. It's not one of the official Amiga libraries so you won't find it on your Workbench disks – but any public domain software company will be able to provide you with a copy. Once you've copied it into your libs: drawer, and re-booted your machine, MuchMore should then work as expected.

Paul

Assembly Lingo Blues

I have been trying to open an Intuition window on a custom screen now for several months and have finally decided to seek help, as all attempts have failed. I have Paul Overaa's Mastering Amiga Assembler book (which unfortunately doesn't cater for V37 code), various RKM manuals, and am using Devpac 3. I'm trying not to use the amiga.lib printf() function etc, as it seems old hat. I've included the source listing for a test program which assembles OK and seems to work up until the time I try to open the window. The screen opens more or less as expected but I am left with the message 'EXECUTING' on opening the window. As you can imagine, this is very hard to debug, especially if you are not sure that all the parameters are right.

David Price
Newport

The listing you provided is much too large to reproduce here (and for me to type in and assemble) but, although there are quite a few obvious faults, the good news is that a lot of the general ideas are sound enough. You do, however, need to watch your structuring of the branch instructions used for error handling – in one section you do a movem to store some registers on the stack and then execute some instructions which would, on error, branch to another area of the code. Under error conditions, the matching movem that should pull the registers off the stack would therefore never ever be executed – so you'd end up with a corrupt stack and the code would crash!

Listing 3 shows some simple custom screen and window opening routines that should illustrate what I'm talking about as far as these flow control issues are concerned. Many of the mistakes in the code you provided are the trivial (but still equally disastrous) slips that we all make. Using NULL when you mean #NULL, incorrectly loading the start of a tag list by using... move.l box_tag,a3 when I'm sure that you really meant... move.l #box_tag,a3 and so on.

A few areas of your code have more serious faults and I suspect that it is the gadget list stuff, prior to window opening, causing at least some of your problems. For example, the call to CreateGadgetA() before doing a

Listing 1

```
#include <stdio.h>
main()
{
int month;
float start_balance, apr, monthly_rate, balance;

printf(“\nEnter starting balance: “);
scanf(“%f”, &start_balance);
printf(“\nEnter APR: “);
scanf(“%f”, &apr);
printf(“\nEnter monthly rate: “);
scanf(“%f”, &monthly_rate);
printf(“\n\nStarting balance = #%f “, start_balance);
printf(“\nBalance calculated using an APR of %f%% = #%f”,
    apr,start_balance*((apr/100)+1));
balance=start_balance;
printf(“\n\n”);
for (month=1;month<13;month++)
    {
    balance = balance * ((apr/100)+1);
    printf(“Month %d: Balance=#%f\n”,month, balance);
    }
}
```

● **Original program – see DICE scanf() problem.**

Listing 2

```
#include <stdio.h>

main()
{
int month;
double start_balance, apr, monthly_rate, balance;
printf(“\nEnter starting balance: “);
scanf(“%lf”, &start_balance);
printf(“\nEnter APR: “);
scanf(“%lf”, &apr);
printf(“\nEnter monthly rate: “);
scanf(“%lf”, &monthly_rate);
printf(“\n\nStarting balance = #%lf “, start_balance);
printf(“\nBalance calculated using an APR of %lf%% = #%lf”,
    apr,start_balance*((apr/100)+1));
balance=start_balance;

printf(“\n\n”);

for (month=1;month<13;month++)
    {
    balance = balance * ((apr/100)+1);
    printf(“Month %d: Balance=#%lf\n”,month, balance);
    }
}
```

● **Changes needed to listing 1 in order to use DICE's scanf() with floating point numbers.**

CreateContext() is wrong. This latter function actually creates the gadtools context gadget – you do not, as you have tried doing, need to explicitly create this gadget yourself!

To put everyone else in the picture let's explain what we're talking about. Gadtools needs to store a number of private data items relating to the gadgets placed in a window and it stores this 'context' information in a dummy gadget which actually forms the start of a Gadtools gadget list. Because of this, a call to a CreateContext() function needs to be made before any real Gadtools gadgets are created. Immediately after the a gadget list has been set up, it is also necessary to make a call to a GT_RefreshWindow() function which completes the rendering of the gadgets. I think the easiest way to explain the various stages is to show you a typical gadget creation routine and you'll find this in Listing 4. It creates the context information, sets up a TEXT_KIND gadget, and then performs the window refreshing. If you use it as a basis for revising your current ideas and check/fix the other areas of your code I've mentioned, I don't think it will be long before you have some (well deserved) success. By the way, we've had quite a few enquiries now from readers wanting help with assembly language intuition and gadtool coding. All I can say is that if enough of you shout loudly enough (via email, snail mail or whatever) AS will definitely get a 680x0 intuition/gadtools tutorial series arranged!

Paul

Listing 4

```
CreateGadgets   movem.l     d2/a2,-(a7)         preserve registers

                lea         gadtool_list,a0     NULL initialised gadget list pointer
                CALLSYS     CreateContext,_GadToolsBase
                tst.l       d0                  last_gadget_p
                beq         .error
                move.l      d0,a0               last_gadget_p
                moveq       #TEXT_KIND,d0
                lea         gadget1,a1          holds gadget details
                lea         gadget1_tags,a2
                move.l      visual_info_p,gng_VisualInfo(a1)
                CALLSYS     CreateGadgetA,_GadToolsBase
                tst.l       d0
                beq         .error
                move.l      window_p,a0
                move.w      #NULL,a1            docs say must be NULL
                CALLSYS     GT_RefreshWindow,_GadToolsBase
                moveq       #1,d0               no errors so clear zero flag
.error          movem.l     (a7)+,d2/a2         restore registers
                rts
```

● A typical 680x0 Gadtools gadget creation routine – see Assembly Lingo Blues

Flicker headache

I bought an A4000 about two years ago, and shortly afterwards, a Microvitec 1438 monitor to go with it (it looked good in the shop!). As you know, the MV1438 can display dblPAL non-flickering modes (but badly). Because a dblPAL screen is shown squashed horizontally, anything graphical is a waste of time because of the odd aspect ratio – I do a lot of work in Imagine4 and I don't like oval spheres! What do I need to be able to display the equivalent of a hires-interlaced screen (640 by 512) or greater without the flicker, as I'm getting a headache. I borrowed an SVGA monitor to try with my Amiga, but I couldn't get that to work at all.

Mark Bonshor
Leicestershire

I wasn't impressed with my Microvitec either, but as you know, trying to find an alternative display is almost impossible. You have two options, and neither is particularly cheap. The first is to buy a flicker-fixer card, and that means the Power Computing Scandoubler 2. This card gives superb results, but it's rather expensive at £399. The next option is to use a graphics card. This solution is looking even better with the recent news that Imagine has been updated to use the CyberGraphics standard. This means that at last it should work perfectly with graphics cards such as the PicassoII or Cybervision64, either of which should cost about £300 or less. Both will speed up your Imagine editing a great deal.

John

Listing 3

```
OpenScreen() and CloseScreen() on entry... need no register parameters!

OpenScreen      move.l      #NULL,a0            no NewWindow structure
                lea         screen_tags,a1      tag list for screen
                CALLSYS     OpenScreenTagList,_IntuitionBase
                move.l      d0,screen_p         save returned pointer
                beq.s       .error
                move.l      #CloseScreen,-(a5)  push deallocation routine address
.error                      rts

CloseScreen     movea.l     screen_p,a0         screen to close
                CALLSYS     CloseScreen,_IntuitionBase
                rts

; OpenWindow() and CloseWindow() on entry... need no register parameters!
OpenWindow      movea.w     #NULL,a0
                lea         window_tags,a1      start of tag list
                CALLSYS     OpenWindowTagList,_IntuitionBase
                move.l      d0,window_p         save returned pointer
                beq.s       .error
                move.l      #CloseWindow,-(a5)  push deallocation routine address
.error          rts
CloseWindow     movea.l     window_p,a0         window to close
                CALLSYS     CloseWindow,_IntuitionBase
                rts
```

● Some custom screen and window opening and closing routines

A500 lives on

I am looking to add a CD-ROM drive to my A500+. Should I get a hard drive as well, or can I run the programs from floppy? I cannot afford much. The CD-ROM drive is only £70 – do you know anyone who is selling one cheaper or a very cheap Hard Drive? Keep up the good work in supporting the Amiga and I might subscribe!

Paul Ellwood
Herts

A CDROM is a great peripheral to add to any Amiga, as it makes it possible to access the vast PD and shareware software collections cheaply and easily. However, I would strongly suggest you think about getting a hard drive first – a hard drive makes using any Amiga much more enjoyable. By scouring the local newspaper's classifieds, or putting an advert in Amiga Shopper, you should be able to pick up a GVP HD500 hard drive for less than £70. If you are lucky, you'll get one with some extra memory in it too. As the GVP hard drive is a SCSI device, you might continue your run of luck by getting a second hand single or dual speed SCSI CDROM drive and add that to your system. As quad, six and eight speed drives are all the rage, you shouldn't have to pay much for a second hand drive.

John

DeskJet Problem

Can you help a non-computer literate 40-year-old who is going up the wall with a printer problem? I cannot get my HP DeskJet to print letters I type in one go. Any typed document is printed in full but on numerous pages. A few lines on each page, in other words. I am using Wordworth 1.2. What am I doing wrong?

A Fitzgerald
Cheshire

In a word, no. That version of Wordworth is so old, I don't even have it archived anymore, so I can't show you how it should be set up. I spoke to Digita International about it, however, and they suggested you spoke to them. Providing you are a registered user of the program, (i.e. you have sent your registration card off) you can get help from them, which is good considering I wanted help from a well known software house recently and, because my 90 days were up, they didn't want to know.

My advice would be to carefully document a specific example of what you are trying to do. All the steps and, if possible, screen grabs of the various configurations you have set from Printer preferences etc. It is probably something quite simple not set up right, but without all the info, it's difficult to sort out from a distance.

The info you need to document would be: the program used, the printer settings in the program, the printer settings in Preferences and the dip switches on the printer. Which leads me to a curious point in your letter where you say the dip switches are all set to off as instructed in the Amiga manual. As the HP DeskJet does not come with an Amiga manual, I was wondering which Amiga manual you refer to.

Larry

What Scanner?

We, as a computer club, are seriously considering purchasing a flat-bed scanner. However, we are not sure what model to purchase, although we are prepared to spend £400. The scanner would need to be colour and the scans would need to be very high quality. The club's machine is a 1200 with 030 accelerator. Can you recommend a flatbed scanner, supplier and the software we need.

John Cumming
Liverpool

Making choices in what equipment and software we like to use is all down to individual preference. When people ask me what DTP software I like, I say Professional Page. Not because I now publish it, but because for six years I have found it's the best program for me and what I do. By contrast, I know other just as experienced people who prefer PageStream.

So choosing what is best is often down to personal choice. Now, I currently have an Epson GT-8500 scanner but if I didn't and I had to go out and buy a scanner today, I would buy the Epson GT-5000 from my local PC store (cost around £360), purchase ImageFX (£150) from Wizard Developments (01322 527 800) and a cable (approx £15 from LH Publishing 01908 370 230) to connect the scanner and the Amiga. That takes you over your budget I know, but because the scanner doesn't come with drivers for the Amiga, you have to purchase these separately. Saying that, Power Computing do the GT-5000 with their own driver software for £479.

This highlights the problem we have on the Amiga in not having an affordable scanner package without all the bells and whistles you get in something like ImageFX. I believe that there is a budget-priced German scanner package and that a UK company are looking at importing it with English documentation. If all that isn't enough, you also have the choice of an SCSI model or a Parallel one. I'd go for the latter because the SCSI one can be a problem if the SCSI card you have isn't supported by appropriate software for the scanner.

You say you want high quality, but what is high quality? The scans from the GT-5000 are good, but to get what I would call "very high quality", I would need a drum scanner costing £30,000 or more. But I am sure you will find the scans good enough for what you need.

You also tell me you have 10Mb of RAM, and although that will be enough for pretty reasonable scans, I know from having an 030 10Mb 1200 that there will be times when you want to scan full A4 at a reasonable resolution of say 150dpi in 24-bit, but won't be able to because you will run out of memory unless you have virtual memory. Using virtual memory however, slows down the scanning process.

Larry ■

Fill in and get answers to your questions — AS**65**

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Your machine:

☐ A500 ☐ A500 Plus ☐ A600 ☐ A1000
☐ A1200 ☐ A1500 ☐ A2000 ☐ A3000
☐ A4000

Approximate age of machine: ____________

Kickstart version (displayed at the "insert Workbench" prompt)

☐ 1.2 ☐ 1.3 ☐ 2.x ☐ 3.x

Workbench revision (written on the Workbench disk)

☐ 1.2 ☐ 1.3 ☐ 1.3.2 ☐ 2.04/2.05
☐ 2.1 ☐ 3.0

PCB revision (if known). Do not take your machine apart just to look for this! ____________

Total memory fitted (see AVAIL in Shell for Workbench 1.3) ______

Chip memory available (see AVAIL in Shell) ____________

Agnus chip (if known) ____________

Extra drive #1 (3.5in/5.25in) as DF : Manufacturer ____________

Extra drive #2 (3.5in/5.25in) as DF : Manufacturer ____________

Hard disk: ____________ **Mb as DH** ____________ **:**

Manufacturer ____________

Extra RAM fitted – type, size in Mb and manufacturer ____________

Please indicate details of any other hardware which could help us to answer your question:

____

Now, use this space to describe your problem, including as much relevant information as possible. Please continue on a separate sheet if necessary.

____



Choose and use the correct compression

***David Taylor** guides you through a variety of packers and compression to help you choose the best for your own individual purpose.*

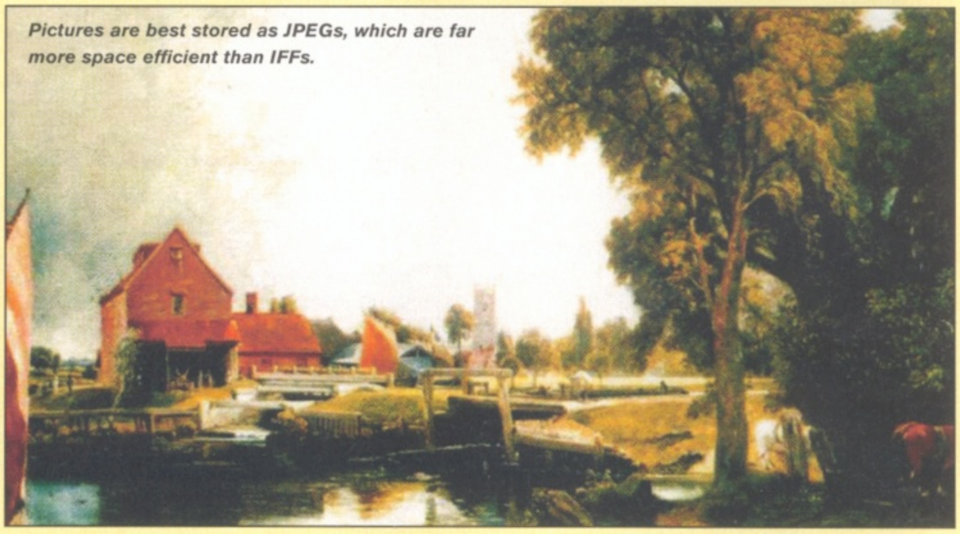
You might never want to archive anything yourself, but it's unlikely that you'll be able to avoid using them every now and again. The problem is, there are so many different ones suiting different purposes that you have to understand how to use several types.

The easiest to start with are packers. These are programs that take an executable or data file and crunch it. Files are packed and stored individually, like the original files. Executable programs remain executable, but are considerably smaller. You might not even know that a file has been packed, although sometimes you may see a tell-tale sign where the screen or cursor flashes as the program loads. Data files that are packed cannot be read by programs unless they are designed specifically to do so. Text files are often packed and read by a utility called ppmore. Other files that are frequently packed are music modules, which many players can interpret.

Automatic

Most files are packed with the well known PowerPacker utility. If you need to create or unpack a powerpacked utility, you can get a version of PowerPacker that has a normal graphical interface which you can use. All you need to do is load the file and it will be automatically be packed, or unpacked if it is already packed, and can then be saved back out. However, PowerPacker is not the best packer available. Along similar lines is a program called StoneCracker. Like PowerPacker, you simply load the program in and save out the new version.

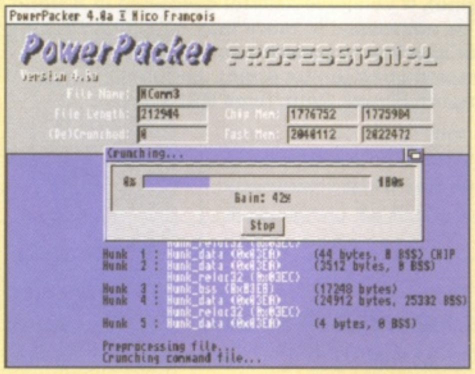
When you pack or come across a packed file, there are two possibilities. It can be packed so that its unpacker is completely built-in and will work on a completely clean system (ie. one with only a standard Workbench). If a program won't work, then it is likely that it is packed with the second option. This is where the program is packed so that it requires a special library, like the powerpacker.library, in order to run. Programs packed this way are ever so slightly smaller than the built-in version, but for compatibility's sake, it's best to avoid packing files this way unless they are for your own personal use.



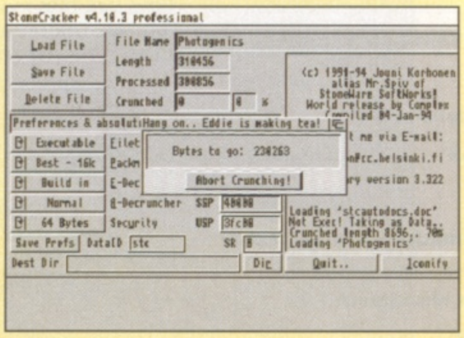
Pictures are best stored as JPEGs, which are far more space efficient than IFFs.

Better still than these types of packers are a special kind based on a library called the xpkmaster.library. Files that are packed using this system might be coded specially to use this system. If not, then they might use a special utility that is inserted into the startup-sequence and which watches files and unpacks them automatically when they are called. The system uses a set of sublibraries which are designed to pack different types of files. Instead of having a single packer attempting to deal with every type of file, there are separate sub-libraries for the likes of executables, music modules, etc.

Recently, there has been a new system called XFDdecrunch released which can unpack any type of file. When installed, the shell command simply checks any file fed it and unpacks any type of packed file. The format is the simple: "xfddecrunch sourcefile destinationfile". This is the best package to get if you don't want to pack files yourself, but want a single way to unpack any problem file that comes your way.



PowerPacker is probably the most popular packer used on the Amiga.



There are other packers available, such as StoneCracker which is even more efficient.

Picture this

If you are only interested in using packers for data files, then packers are not the best solution. If you want to distribute pictures, then IFF, although the Amiga's generic format, is not the best method of storing images. Most people today, especially with the inclusion of the datatype system and better picture viewers, can use many different types of format.

Perhaps the best format to use, and one that can be used on different platforms too, is the JPEG (designed by the Joint Photographic Expert Group). JPEGs are a form of lossy compression, where data is actually removed from the picture so that the overall size is smaller. When de-compressed, the program will try and gauge the difference between colours to make everything seem smooth. JPEGs can be saved at different levels and you will probably be able to save out at as low as 60 per cent without any visible difference. Alternatively, you can save space by reducing the number of colours in an image. Personal Paint from Cloanto is a paint package that does this particularly well and, although it doesn't save JPEG images, it will save out GIF files which are also heavily compressed

Sound samples also have a form of lossy compression, but these are not as widely used and it's not best to distribute any files in this form. You can get any of the packers and unpackers from the Public Domain and many have been included on past Coverdisks. Hopefully, this introduction has given you some idea of what types of packers and compression you are likely to encounter or use and the best way to deal with them. ■

Choice Domain

There is a whole multitude of useful programs and utilities lurking in the depths of the Public Domain and ***Steve Liddle*** *is here to guide you through some of the very latest offerings...*

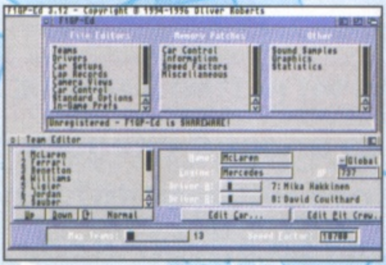
This month we've picked out a varied selection of the programs and utilities that are currently floating around in the Public Domain. Some programs are far better than others, but all of them are definitely worth a mention.

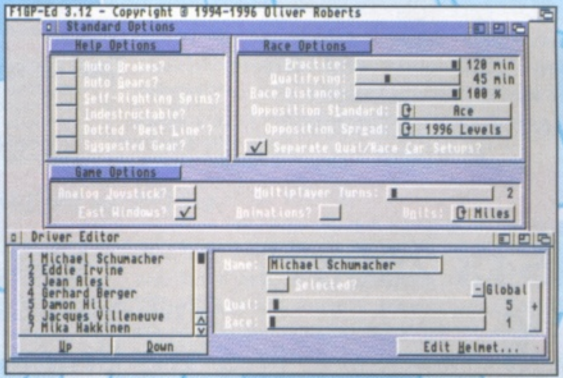
F1Gp-Ed3

The F1GP-Editor means you can customize your copy of MicroProse's Formula One Grand Prix game. The easy to use GUI allows you to change just about everything in the game that you could possibly want to change from the colours of the cars, to how they respond. The 'Team Editor' allows you to change the teams name, engine, horsepower, driver, second driver and how many teams to use. The same sort of features also apply to the 'Driver Editor', 'Car Editor' and the 'Lap Record Editor'.

Of course, there are tonnes more features but unfortunately we haven't got room to list them all here. F1GP-Ed is shareware, so to get all the features you will need to register. If you own F1GP this utility is worth its weight in gold because you can breath new life into an old game and have great fun too. Obviously to make use of the editor you will need an original copy

Right: ***A slick and well designed GUI makes F1GP-Ed a pleasure to use.*** **Below:** ***The superb F1GP-Editor, now on version 3.12.***





of Formula One Grand Prix / World Circuit by MicroProse – this must be version 1.02. Also, note that the author requests that no more than £2 (inclusive) be charged for a copy of the game by PD libraries.

Verdict: 96% Star buy

Word Puzzle Viewer

WPV contains a program which enables you to view Crossword and Wordsearch puzzles created by the Licenceware program 'Word Puzzle Pro' (reviewed last month). It allows anyone to complete the puzzles on screen, rather than having to print out the puzzles and complete them on paper. The idea is that owners of the full licenceware version of Word Puzzle Pro can send their creations into the PD or use the puzzles for competitions or just fun. There are plenty of example puzzles on the disk and a few even offer prizes. It's nice to see quite an original idea for a change.

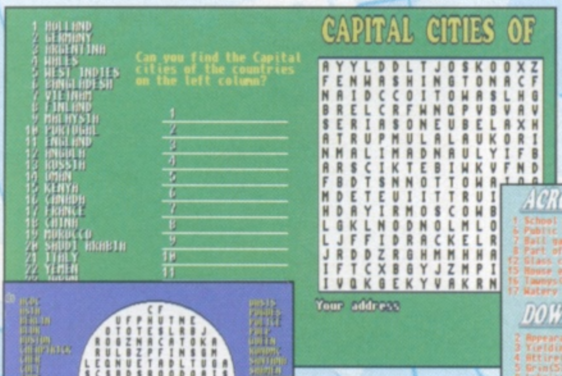
Verdict: 88%

Beyond Sanit-e #3

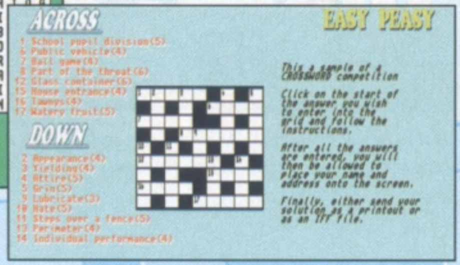
This is a two disk magazine that covers areas

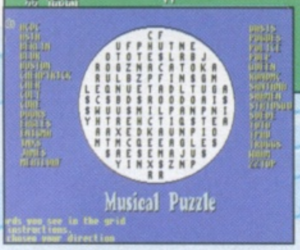
Who, what, where, when, why, how...

Product	No of disks	Type of product	Price	Supplier	Contact	Verdict	Page
AFD Files 110	58k	Texts		Aminet	Docs/misc	88%	
IconifyGadget	12k	Utility		Aminet	Util/misc	95%	
UpdateLibs	6k	Utility		Aminet	Util/misc	89%	
Remover	9k	Unistaller		Aminet	Util/misc	92%	
Reality Icons	1	Icon collection	0.75	Almond PD	01506-493671	85%	
F1-GP ED V3	1	Game Editor	1.00	17 Bit	01924-366982	96%	
Pic It	1	Quiz	1.00	17 Bit	01924-366982	60%	
Word Puzzle View	1	Puzzle displayer	Disk+stamp	F1 Licenceware	01392-493580	88%	
J-Windows	2	Amos Extension	4.99	F1 Licenceware	01392-493580	96%	
ABGTWB3 Vol 5	1	Wbench tutor	3.99	F1 Licenceware	01392-493580	86%	
Work And Play	1	Educational	3.50	Horizon@Seasoft	01903-850378	71%	
One Finger Demo	2	Demo	1.50	OnLine PD	01704-834335	75%	
World Of Animals	2	Multimedia	1.50	Online PD	01704-834335	84%	
Disco	1	Music disk	0.75	Online PD	01704-834335	76%	
Internet Utils#4	1	Utils comp	0.75	Online PD	01704-834335	93%	
Garden Birds	3	Multimedia	2.25	WildLive	2, Southgate, Oakhampton, Devon EX2-4BH	30%	
Beyond Sanit-E	2	Disk mag	2 blanks +postage	PowerTek	91,Tennyson Gdns Lincs. LN9-6DF	86%	



Left: *A Wordsearch puzzle created by 'Word Puzzle Pro' and displayed be the PD program 'Word Puzzle Viewer'.* Below: *A neat and attractive crossword, that could be used in competitions or fundrasing.*





WPV: You can even have funny shaped puzzles, if you want!

ranging from UFO/X-Files articles to video and software reviews. There are plenty of articles to read and almost certainly something of interest to everyone. DMC Gold (A disk mag creator) has been used for the magazine engine, which is easy to use and can look good, though Beyond Sanit-e's customisation of DMC doesn't look very nice to be honest. You can't complain at the cost of the mag, just send two blank disks and a stamp directly to the Editor. Give it a whirl, what do you have to lose?

Verdict: 86%

Wild Live Garden Birds

Oh dear, this one had me in a rage within minutes. It's not that I have anything against birds, (no sexists jokes here please). In fact, I was quite interested to see this 'Multimedia' production. The program comes on three disks which are hard disk installable, but it takes a mind boggling 15 minutes or so to get it installed properly using the 'friendly and extremely easy to use' installer.

The installer, in a bid to make things friendly, has ironically made life hell with a barrage of stupid questions and awkward buttons. Running the program changes your Workbench colours to the most awful colour scheme I have ever witnessed in my life. It doesn't matter if you use an 8 colour or 256 colour Workbench either, it still looks gross. Then we have three gruesome screens that torture you by making you wait too long, aghh, I hate that. At last, we get to the main menu. Click on 'interactive mode' and you get to pick a bird to view. You then have the choice of a few still pictures (all of which are small and blurred), a video clip or some text about the bird.

The video clips are, I presume, the main selling points of this program and to be quite frank they are very poor. No colour or sound and only a few inches square. Each frame of the 'video' is read from your hard drive as required which makes the footage run at a treacle drip inducing 10 fps. This is basically a waste of good disk space as the information gained from the video clips is extremely minimal.

The text could of saved the program a bit of face but as it turns out there is very little on offer in that department too. I hate to be so negative about any program, especially when someone has obviously worked hard to produce something, but for me this one is just not up to scratch, even for PD. If the program used its own environment instead of Workbench's, used the Commodore installer, improved the video footage and had a lot more information to offer, then maybe I could change my mind.

Verdict: 30%

The PD directory

On the disk

More details of names and addresses of PD companies, and how to get hold of PD software can be found in the PD Directory on the Coverdisk. It used to be printed within the magazine, but had to be in very small text because of the amount of information it contained. To solve this, we have updated and recompiled the list and put it on our Coverdisk as a text file in the InformationZone.

The InformationZone contains both the PD Directory and the list of User Groups (which also used to be in the issue). They are both in two formats, AmigaGuide and ASCII. The AmigaGuide enables you to point and click your way to the information, making it much easier to find the details you require. Read the ReadMe file for more information. See page 10 for details.

Pic-It

Pic-It is a pub quiz game for two to five players. and my first impression was that it was strange not having a one player mode for this type of game. Whenever a question is correctly answered digitised pictures or drawn puzzles are revealed a square at a time.

There are two question banks supplied, 'Phrases' and 'People' and they hold 100 questions each. In my opinion an option to create your own questions is essential in this type of game (as well as a one player mode), these two omissions spoil Pic-It for me and surely make the game of limited value. To get more questions you have to register with the author which only costs £3 and you will receive two more question banks.



Pic-It: No one player option? What about all the lonely people out there with no friends?

Verdict: 60%

Reality Icons Vols 1 & 2

Reality Icons are simply disks of 256 colour icons. If you do not use 256 colours on your Workbench they will be of no use to you as they unsurprisingly come out as a messy splodge.

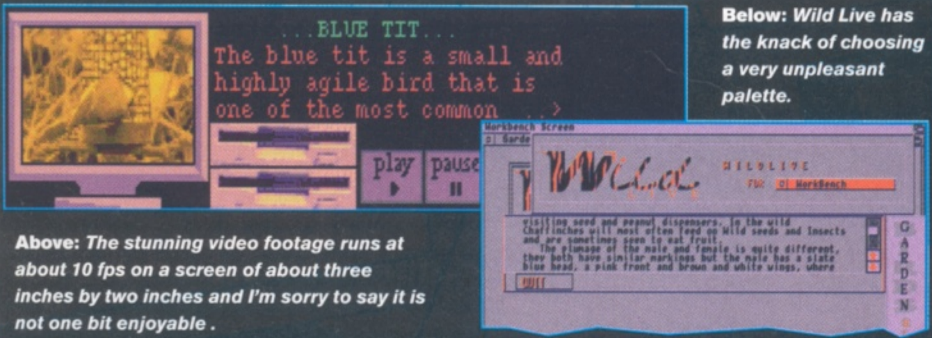
If, however you do use 256 colour mode and you need some cool looking icons these disks will do very nicely. As you can see from the screenshots there is a fair range of subjects. All the Icons are set as drawer icons but you can easily change that in any decent icon editor.

Verdict: 85%

▶ 44



Pic-It: Now come on, if you are over 16 years old you must know who he is.



Below: *Wild Live has the knack of choosing a very unpleasant palette.*

Above: *The stunning video footage runs at about 10 fps on a screen of about three inches by two inches and I'm sorry to say it is not one bit enjoyable .*



Reality Icons Volume 1: A set of 256 colour icons that have been converted from PD pictures.

One Finger Demo

This two disk demo from OnLine Pd is nearly four Mb of quite impressive video footage that runs at an acceptable rate albeit in about eight heavily textured colours. This demo by Reality requires a full four Mb of RAM, an AGA Amiga and a hard drive, if you only have a four Mb machine you will probably have to boot with no startup-sequence and run it from the CLI.

OnLine PD have made the disks easy to install to hard drive with a simple but effective installer that actually works, hurrah. The demo itself is entertaining for one viewing, but after that I felt no compulsion to run it again. If the music was a bit more powerful and memorable the case may have been different. What this demo boils down to then is about three minutes of video of some chaps dancing about and a model train flying round a track. Oh, and not to forget, a hand that frequently pops up to show the one finger of this demo's title.

Verdict: 75%

World Of Animals

It is certainly a good month for animal lovers what with Garden Birds and this one. World Of Animals is also a 'multimedia' attempt, but produced in a very different fashion to WildLive's program.

World Of Animals is extremely easy to use, looks good and contains a reasonable amount of information, pictures and samples. This PD version is quite limited though and to get the best out of the program you need to register with the author for £7.50 to get the full three disk version. The program covers ten animals,



Reality Icons Volume 1: As you can see it doesn't work too well on some of the pictures.

Chimp, Dolphin, Elephant, Horse, Lion, Bear, Fox, Owl, Panda and Parrot. Each animal has a nice picture, sound sample and some text to go with it. My first criticism is that it would have been nice to be able to see the photo of the animal and play the sound sample at the same time, though this is probably a limitation of Hyperbook, which was used to create World Of Animals. The fact that you could get a lot more information from a book on the same subject for around the same price as the registration fee will ensure minimum registrations for the author.

As far as I can see the only benefit of the information being on disk is interaction, but there is very little interaction with World Of Animals I am sorry to say. All said and done though, this is a very good effort.

Verdict: 84%

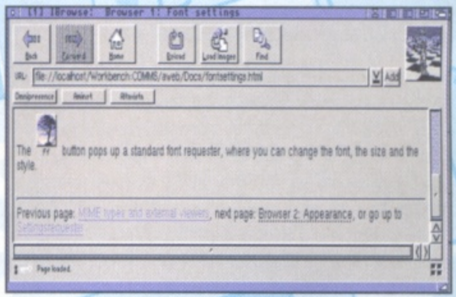
Internet Utils #4

Another disk from OnLine PD. This one is very good, containing three useful items, IBrowse demo, The Amiga Main Internet List and ZGIF a datatype.

IBrowse, of course, is the star of the show. It is a World Wide Web browser and similar in some respects to AWeb. I personally prefer AWeb but IBrowse still has a lot to offer and is definitely worth a good long look. The main argument against IBrowse is that it requires MUI to run. MUI tends to slow things down which hacks a lot of people off resulting in them turning to AWeb, which must be the fastest WWW browser on the Amiga by far. IBrowse has also suffered a bad reputation for having bugs but this version seems a lot more stable though the quit option often results in a program failure error. With this demo you must register after 31 days of use and you are reminded of this each time you run it. Once the bugs are ironed out and IBrowse can match AWeb's speed it will be the Web browser to be seen with on the Amiga.

AMIL (Amiga Main Internet List) is a huge AmigaGuide file/database of Amiga users/programmers/vendors/companies etc. from around the world. It is a huge project to undertake and the author needs your help to carry on building the list which could eventually turn out to be the equivalent of the Yellow pages for the Amiga. A valiant effort.

The last utility on this disk is the ZGIF



IBrowse: With a little fine-tuning it could be the best Amiga Web browser one day.

datatype. Once installed it allows Web browsers and other datatype supporting programs to load in GIF format picture files. This is currently the fastest version around (so the author claims) and loads in a GIF picture at about the same speed as an IFF file.

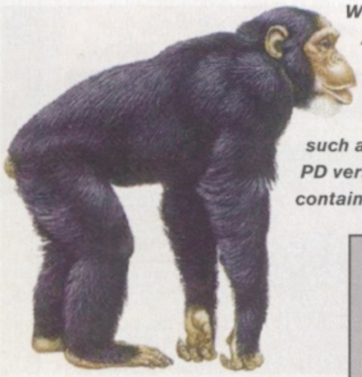
This disk is pretty darn essential if you're planning to join the Internet. If you are already online and don't have IBrowse and AMIL then you should be shot. At OnLine's prices (75p a disk) this compilation represents excellent value.

Verdict: 93% **Star buy**

Disco

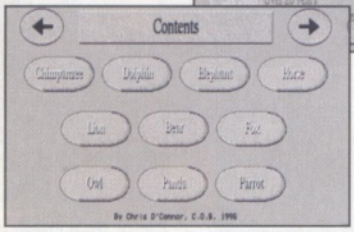
I'm not too sure what this disk is supposed to be, an advert for a bulletin board or a demo? Anyway, as you may well have guessed from the title 'Disco' is a sound track with flashing lights and animated cartoon doing some jerky dancing. The music itself is great, very danceable but the whole thing only lasts a minute or so. Make of that what you will. Requires an AGA Amiga with more than two Mb.

Verdict: 76%



World of Animals contains some nice pictures such as this, but the PD version only contains four.





Right: *The front-end of World Of Animals. It's clear and easy to use, a good start for any program.*

Above: *After clicking on a subject from the contents screen you arrive here where you can chose to view a picture, read some text or listen to a sample.*

Licenceware**Choice**

Work And Play

This childrens educational title has three games which can be accessed from a simple menu. The first game is 'Funtime Tables' which is a board game designed to test a childs times tables. One or two kids can play and there are adjustable skill levels so that older children can play younger children without too much of an



Work and Play: The Funtime Tables board game is definitely the best program on this disk.

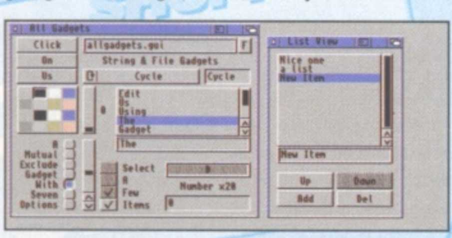
advantage. Game two is 'Let's Go Shopping' and the child is taken to a shop where money related sums using multiplication and division are presented in the vein of 'how many carrots at 6p each can you buy for 36p?'. The last game, 'Click Clock', attempts to teach the time, though it's not very entertaining.

Verdict: 71%

J-Windows

J-Windows is yet another intuition extension for Amos but this one has a lot to offer. Nearly 200 new Amos commands, Gadtools support, full Workbench support including Listview, AGA graphics, full support for menus, checkable items, mutual exclude, hotkeys etc. The extension is easy to install, installer provided, and uses slot 16 which clashes with a PD extension called 'EasyLife', so you will have to choose which to keep or use an extension switcher program available from Aminet. J-Windows requires Workbench 2 or higher, Amos Pro V2 and Compiler. The really interesting part of this extension is that it allows you to import source code generated by Gadtools. Gadtools is an intuition designer that allows you to 'paint' gadgets, buttons, menus etc. onto a screen and save out the resulting source code. J-Windows then converts this into Amos procedures for you. So in essence you can create fantastic looking intuition front-ends without writing a line of code, impressive. Of course you will have to write the code to manipulate any interface you design.

J-Windows has plenty of fairly easy to use commands for this purpose and they are all covered in a huge manual and 13 part tutorial. The program comes on two disks and there are lots of source code examples to play with and learn from. The author has even seen fit to fix a few Amos bugs as a bonus. If you are not familiar with intuition programming then the going will be tough at first, but if you stick at it



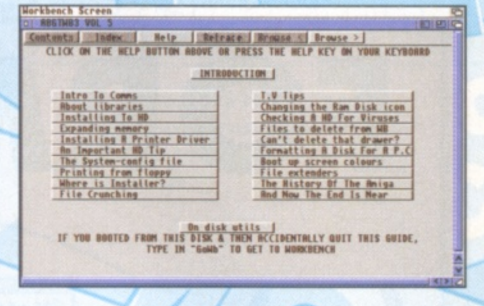
J-Windows: The code to generate these windows was completely written by Gadtools and not one line of code had to be written to run them.

you should be able to produce some impressive results quite quickly. Gadtools is not supplied but it is freely available from most PD libraries and the Aminet. This is easily the best intuition extension released so far, it isn't the easiest to learn, but that is the price you pay for power.

Verdict: 96% **Star buy**

Absolute Beginners Guide To WB 3.0 v5

This is the last disk of a five part tutorial for Workbench 3 owners. Each volume (disk) of the series is a self contained program but the author suggests that to get the best from the guides you should read them sequentially. This volume is a grab-bag of hints and tips and covers 19 subjects all in the easy to use Amigaguide format so you just point and click on a button to



Absolute Beginners: A grab-bag of tips covering 19 subjects for the last in this five part series.

read a subject. Topics covered include an introduction to Comms, the history of the Amiga, installing a printer driver, crunching files, checking for viruses, files you can delete from your Workbench disk, a look at system libraries and what the 'System-Config' file is for etc. If you have read the last four volumes of this guide then the subjects covered here just about tie it all up nicely. There are also a couple of useful PD programs on the disk to fill it up. The author plans to make the five disks into one huge Amigaguide file for hard drive owners and anyone who has bought all five will get it free.

Verdict: 86%

AminetChoice

J-Windows

Picture this scenario; you install a gigantic application, it copies files to all different places of your hard drive. After playing with this new program, you decide you want to delete it. You now have the time consuming task of tracking down as many of the installed files as you can, chances are you will not find them all and it's most irritating. If the applications installer was the Commodore installer you could ask for a 'log file' to be created at the time of installation, this log file tells you the location of every file that is installed. That is all well and good but it can take a lot of time deleting all those files. Enter 'Remover' a very neat Cli only utility that looks at a Commodore Installer log file and does all the deleting for you. The problem with this type of program is that if it went off and deleted everything in the log file it would almost certainly delete important system files like libraries, startup-sequence, C commands etc. Remover gets around this problem by asking you to confirm every file to be deleted. This request can be disabled, but you had better know what you are doing or you will get in a right mess. So, next time you install something with the Commodore installer remember to select 'create log file' and get hold of this very useful utility.

Verdict: 92% **Star buy**

UpdateLibs

UpdateLibs is a utility to help with installing libraries from disks that do not come with an installer. It scans a specified directory for libraries, and checks the libraries version numbers against those on your system disk. You are then asked if you want each new library installed or not. I used Updatelibs to search all my CD-ROMs for newer versions of libraries and found quite a few. My only niggle is that the program reports a library even if you have exactly the same version/date and size already installed which is pointless and time consuming when you are wading through hundreds of libraries. Overall a very simple but effective freeware utility.

Verdict: 89%

Iconify Gadget

I found this program really useful. It adds an extra gadget to all Workbench windows, including any applications' windows. This extra gadget, when clicked on, puts that window into an iconified state on your Workbench in the form of a small icon. To get back the window you just double click on the icon. This is very useful if you're carrying out lots of tasks on an overcrowded Workbench screen. You won't realise how useful this is until you've had it on your system for a few weeks. I'll be keeping it installed and I fully recommend it. Requires Workbench 2 or higher.

Verdict: 95% **Star buy**

PD submissions

If you have some exciting PD disks that you would like to be considered for review in Domain Choice, send them in to Amiga Shopper, Future Publishing, 30 Monmouth Street, Bath BA1 2BW, clearly marked as a PD submission. We welcome any type of disk, except games.

If you are a PD house, make sure you include all the information necessary, such as how to contact you, how much the disks cost and how people can pay. If you are the author of the program, state where people can get your program from, and whether you would like us to consider it for inclusion on a future ShopperChoice Coverdisk.

Information about new PD houses or PD authors is accepted for inclusion in the PD directory (see box on page 43 for further details).

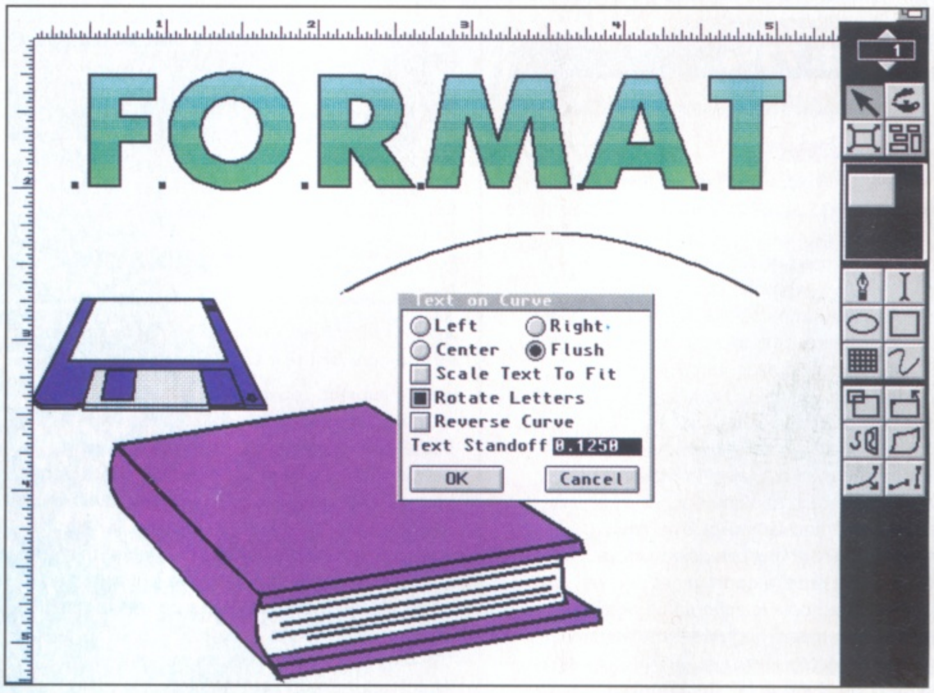
Whatever happened to the heroes?

here is some great software out there right now. But why oh why did the companies producing gems stop? **Ben Vost** *looks at some golden oldies...*

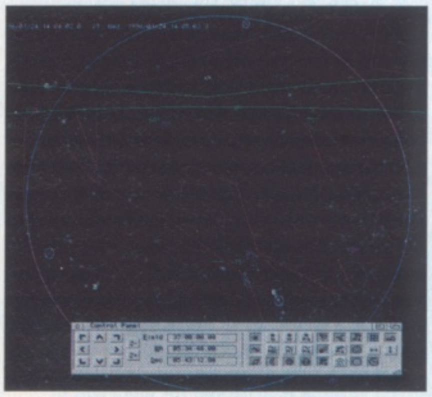
Photogenics 2. World Construction Set. Digital Universe. Great products all, but I can name you a fair few from the Amiga's heyday that still echo around our shrinking community. What about MovieSetter from Gold Disk? The package that set Eric Schwartz on his way to fame and fortune and that still provides the facility for Charlie the Cat and countless other great animations, stopped production way back when in about 1993.

What we really need to see is MovieSetter 2, with support for AGA, graphics cards, built-in sound and picture grabbing facilities and the ability to save out as AVI. Most of the rest of the package doesn't even need any tweaking, save for the non-standard file requestors, keyboard shortcuts and other oddities that Gold Disk was so fond of furnishing their programs with. Let's see Gold Disk hand over their aging source code (no doubt festering in a cupboard somewhere, if it even still exists) to some enterprising coders.

Staying with Gold Disk, their DTP and structured drawing packages could do with a similar facelift. ProPage is still being sold by LH Publishing, as is ProDraw, but they are both stuck back in '93. Ditching the CGFont standard in favour of PostScript type 1, support for the DR2D standard, as well as a proper PostScript interpreter for EPS images and you'd be back in the game. Of course, as with MovieSetter, all those non-standard things like the keyboard shortcuts and requestors would need replacing. Likewise with ProDraw, together with the addition of a single line tracer and support for PostScript fonts, the program could be a best-seller once again.



ProDraw – a simply splendid package, but unfortunately it is woefully out of date.



Digital Universe is a superb program but software of this quality is no longer common.

Programming tools

OK. So I've given Gold Disk a good going over. Now onto another topic, programming. How can anyone write decent software for the Amiga if there are no tools available for writing software in the first place. At some point this year, we hope, we will have Storm C/C++, the first C compiler on the Amiga to fully support 060 code optimisation. But there are other programming languages out there. Take CanDo for example. A nice tool, one that never really got the recognition it deserved in this country. As a result, CanDo is currently stuck at version three, which is damn hard to find, and the programming team behind it have split up. While CanDo is great it desperately needs improvement in the form of allowing the user greater access to the operating system and using standard system gadgets itself. As it stands, Inovatronics hasn't been closed down, but the guys behind it won't start the company back up again unless there is a renaissance for the Amiga. At least CanDo is in a relatively strong position compared to MovieSetter. But the big daddy of Amiga development systems is, without doubt, the SAS C package, which was discontinued at the end of 93. This package is the gold standard for Amiga development and Storm C will have a lot to live up to. Perhaps this same mysterious benefactor should approach the SAS Institute and ask them for the code to bring SAS C into 1996.

Moving on, there's Amos. I know a lot of people sneer at the package, but with a few tweaks to cater for proper Intuition gadgets and requestors and other minor adjustments, this package could be back on sale again. At the moment, the only new source of Amos programmers is coming from a magazine coverdisk about two years ago, so what will new

owners of the Amiga do for an easy-to-understand BASIC interpreter and compiler?

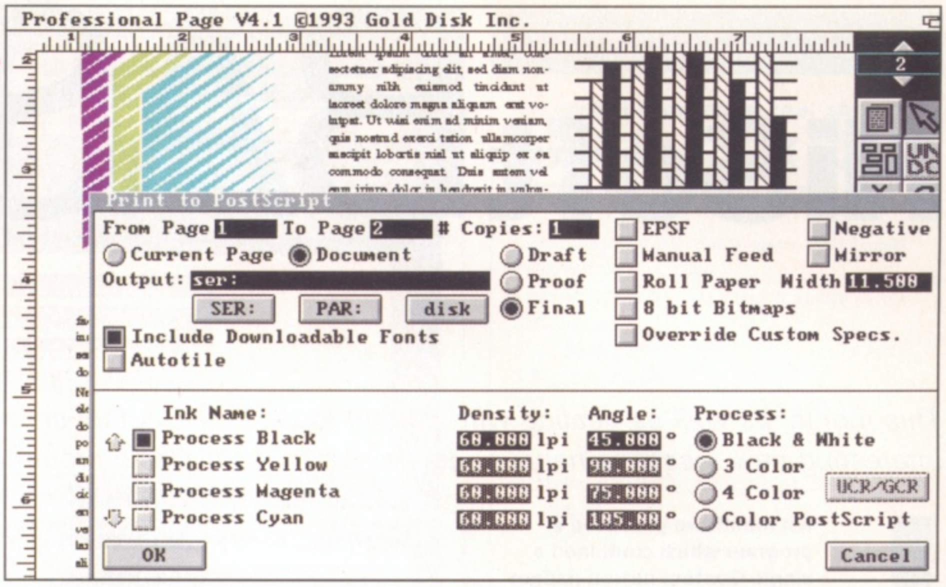
Let's get away from programming and back onto a graphics theme. The one paint package that absolutely everyone knows on the Amiga is Deluxe Paint in all its various incarnations. I've had DPaint from when it was still DPaint I, let alone the version five that currently graces my hard drive. But there won't be a version VI to look forward to unless someone takes the code from EA and continues to develop it. For DPaint to be a success again won't take all that much – support for RTG graphics cards would be nice, as would faster operation, but other than that it still is pretty good overall. And here's a paint package that could stand some refurbishment: OpalPaint. Now I know that not everyone wants to go and buy a second-hand OpalVision card in order to use OpalPaint, but it really is an excellent piece of software. Mess around with the code so that it works on any RTG graphics card, even add in a driver so that you can use it on a HAM8 display, and you'll have a truly serious competitor for TVPaint.

Word processing

Another piece of software that was heavily plugged in Shopper and Format a while back was Presentation Master from Oxxi. While a great tool for generating slides, it also shone when it came to manipulating postscript text into shapes and styles previously unheard of on the Amiga. Of course, since Wordworth gave us its text effects PM's don't seem quite so exciting, but as a stand-alone competitor for Powerpoint or Applause on the PC, Presentation Master, if given a lick of paint, would certainly stand the comparison.

Finally on the graphics front, a piece of software that didn't find much use outside its very small niche, but that was damn useful none the less, was Take Two. Take Who? I hear you cry, but this piece of software was Rombo's gift to serious traditional animators everywhere. Take Two was designed to interface an animator with an Amiga equipped with one of Rombo's Vidi Amiga digitisers. It even came with a peg board for properly holed animation cels so that they wouldn't fly around as you digitised them.

This is just a very short list of items that have fallen by the wayside, and I don't want to depress you all with tales of the Amiga's lost



ProPage was used by Jam for all its layout and is now used by Em. A lot of people still argue it's the Amiga's best DTP package.

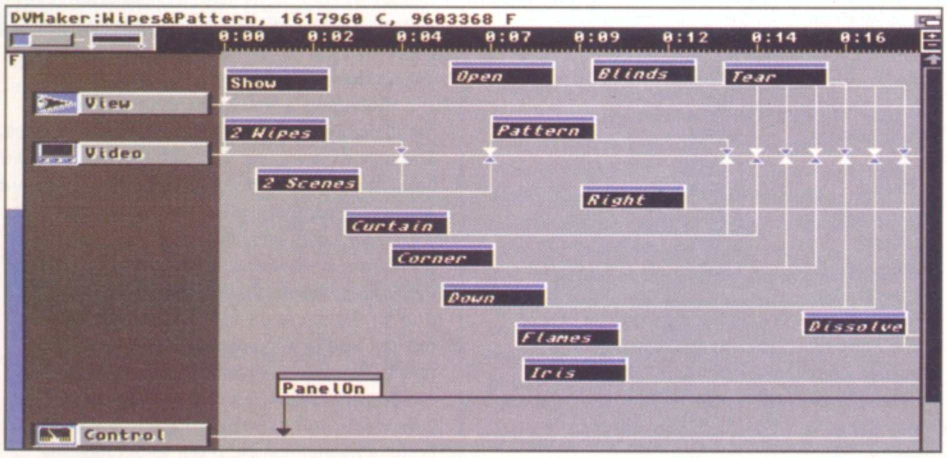
> "Now it seems we have to depend on the **shareware** scene to bring us the sparkly gems"

glories. There are still the aforementioned Photogenics 2, World Construction Set and Digital Universe to be played with, along with all the other great software that still exists for the machine. But, speaking as someone who has seen Amiga software come and go for the past nine years, it does seem to be getting a little thinner on the ground lately doesn't it? There are more version twos, threes and fours than there are version ones these days and that is a sad thing to behold. Now it seems we have to depend on the shareware scene to bring us the sparkly gems we miss from commercial developers. Stuff like MUI, MainActor, IBrowse and many others are the product of feverish minds working in solitude and will thus result in a flurry of 'standards' that each individual is keen for others to adopt but doesn't have the resources to ensure that the next programmer down the line won't have to reinvent the wheel. Perhaps the new new owners of the Amiga will turn things around, we'll have to wait and see, just like last year. ■

Conclusion

As it stands the Amiga isn't looking in great shape in the very arena that Escom bought the machine for in the first place. With no replacement for titles like MovieSetter and Take Two, using an Amiga for multimedia and animation work becomes a less attractive proposition, and buying one for program development becomes almost laughable. It is also very sad to think that there are now areas that aren't even catered for by the Amiga where once it reigned supreme.

I can only hope that this article will stir someone up to approach Gold Disk, Inovatronics, Electronic Arts and all the other companies that have abandoned the Amiga, and ask them for the source code for their defunct programs. It may even mean paying some money for them, who knows, but it must surely be worth it.



Whatever happened to Mike Posehn and his superb Deluxe Video? Just a few tweaks here and there could make it a winner again.

HiSoft BASIC2

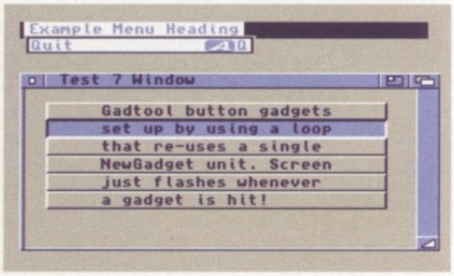
This month, as well as dealing with gadget loops and Gadtool-style menus, **Paul Overaa** *unveils an interesting new message handling technique for your Basic programs...*

Last month we produced a program which contained a single Gadtool button gadget that flashed the screen whenever the gadget was hit. The good news now is that NewGadget structures are re-usable and to create a series of gadgets you can often use a loop. This loop makes repeated calls to the gadtool library's CreateGadget() function whilst adjusting those NewGadget fields that need alteration.

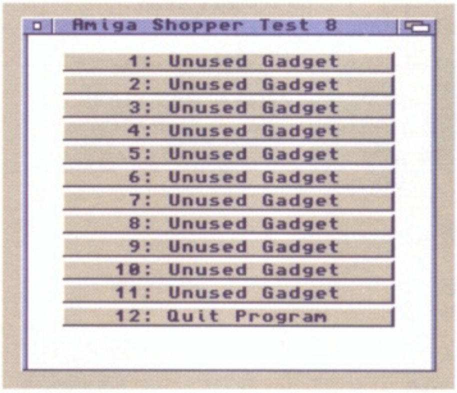
The first program in this month's tutorial (test7.bas) uses this method to set up six button gadgets, each with its own text and position. A G_TEXT$() array is defined and the loop simply associates the i'th string with the i'th gadget. To position the gadgets the ng_TopEdge% field is increased by the height of a gadget each time a new gadget is created, so the completed loop looks like this...

```
FOR i=0 TO 5 'Loop for creating six gadgets
POKEW VARPTR(ng(0))+ng_TopEdge%,G_TOP&+i*G_HEIGHT&
POKEL VARPTR(ng(0))+ng_GadgetText%,SADD(G_TEXT$(i)+CHR$(NULL&))
gadget_p&=CreateGadgetA&(BUTTON_KIND&,gadget_p&,VARPTR(ng(0)),TAG_END&)
NEXT i
```

The result is that each gadget appears on screen immediately below it's predecessor and, in the wake of last months' discussions on gadget creation, these loop extensions should be easy to follow. I'll explain how we identify which gadget is being used when an IDCMP_GADGETUP& message arrives towards the end of this installment. For the moment however, I ought to make it clear that the real purpose of the test7.bas example is to provide a brief excursion into the world of Gadtool menus.



The test7 program shows how to create simple Gadtool menus.



More gadgets loops – this time taken straight from the test8 program!

This excursion is needed because as you step outside of conventional (ie HiSoft Basic created) windows, in order to gain access to Gadtool gadgets, you loose the use of HiSoft Basic's own high-level menu statement. One solution is to use Gadtool's own menu routines but be warned – compared to the normal way that HiSoft's high-level MENU statements are used this next section is going to be a nightmare. The details which follow incidentally are provided to offer an anchor point for discussions related to an alternative approach.

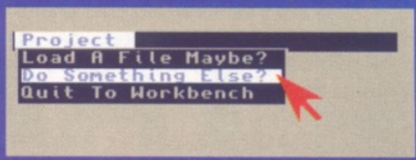
Gadtool Menus

Gadtool menu definitions are based on sets of data blocks called NewMenu structures which can be described like this...

```
struct NewMenu       1 BYTE
nm_Type%             4 BYTE
nm_Label%            4 BYTE
nm_CommKey%          2 BYTE
nm_Flags%            4 BYTE
nm_MutualExclude%    4 BYTE
nm_UserData%
```

The nm_Type% field is used to specify one of three entry types and standard names are available in the HiSoft headers: NM_TITLE& indicates a menu title, NM_ITEM& is used for menu items, and NM_END& is a dummy 'end of menu' marker.

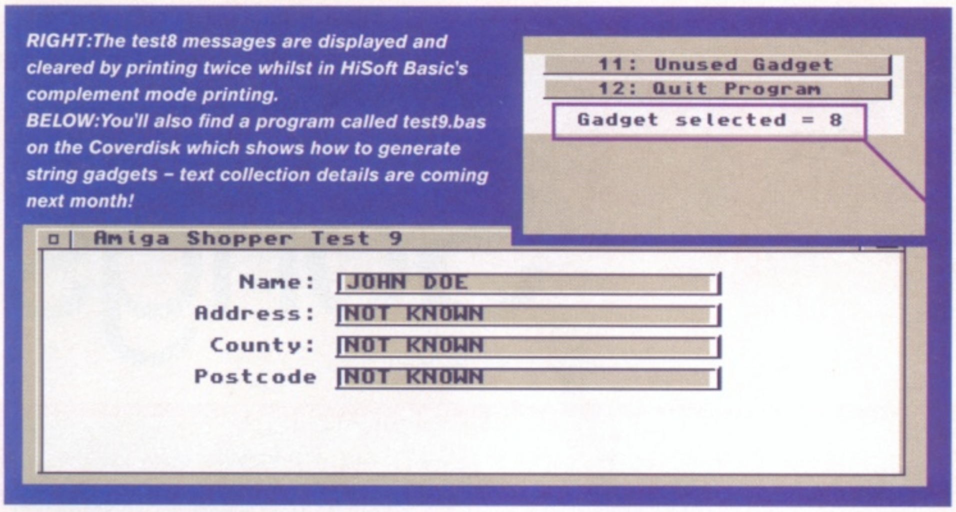
The only other fields of immediate interest are the nm_Label% and nm_CommKey% fields which are pointers to text strings containing a name and a keyboard shortcut for the item in question.



The test8 program menu is produced using easy-to-use HiSoft Basic Menu statements.

To build a menu via Gadtools it's necessary to set up an array of NewMenu structures which represent the various menu titles and menu items required. To get the menu displayed a number of steps have to be performed: Firstly, Gadtools needs details about the screen on which the menu is going to appear and this is achieved by making a call to a GetVisualInfoA&() function [on exit a corresponding FreeVisualInfo() function also has to be executed]. Secondly a CreateMenusA&() routine must be performed to carry out the Intuition-related menu setting up work. This call too must be coupled with a deallocating function, FreeMenus(), before a program terminates. Unfortunately, the menu structures created by the above mentioned functions still contain no size or position information and this information is produced using LayoutMenusA&(). Finally the menu can be installed in the chosen window by the Intuition function SetMenuStrip() using a coupling ClearMenuStrip() call prior to closing the window.

Setting up a NewMenu structure is much the same as setting up a NewGadget structure. The only difference is that with menus you need separate structures for each title, menu item and so on. The example menu I've provided is very simple and contains just one menu item. Three NewMenu structures are needed (one for the menu title, one for the single menu item, and one for the structure holding the NM_END& marker) so I've allocated them using a DIM nm(3*(NewMenu_sizeof%\2)) statement. A temporary variable, x, is set to the size of a NewMenu structure and added to the structure offset specifications in order to access the second and third structures in the nm() array. Listing One shows the operations necessary to



RIGHT: The test8 messages are displayed and cleared by printing twice whilst in HiSoft Basic's complement mode printing.
BELOW: You'll also find a program called test9.bas on the Coverdisk which shows how to generate string gadgets – text collection details are coming next month!

get the menu installed but you'll get further details from the test7.bas coverdisk source.

Is This A Rocky Road Or What?

From the menu creation viewpoint the test7 program is just a 'rough and ready' example of the various stages needed. Nevertheless it shows quite clearly that creating a menu with Gadtools is nowhere near as easy as using HiSoft Basic's own menu statements.

Despite being an avid fan of HiSoft Basic 2, the established path we are following, namely the direct opening of an Intuition window outside of the HiSoft Basic environment, has certain disadvantages. Not only do you loose those easy-to-use menu statements, but many other Basic commands such as Print and Print Using, Area and Area Fill, Line, Paint, Palette, Preset and so on, also stop working – because HiSoft Basic has no control over the window we've opened.

This in turn makes it necessary to use more external library function calls to make up for the lost commands. For example, instead of doing a simple Print statement to get a line of text displayed in a window the Intuition PrintIText() library routine needs to be used. Needless to say this affects the overall style of the code needed within a HiSoft Basic 2 program and, taken to its logical conclusion, the outcome is that the code starts to look less and less like a Basic program and more and more like C or assembler code.

The benefit, and to a large extent the only immediate benefit, derived is that we get to use Gadtool gadgets in our programs which wouldn't otherwise be available, but is this trade off worth it for the typical coder programming in HiSoft Basic 2? Like me, I suspect many of you will have your doubts but this is where the good news arrives. I've come up with a method for connecting Gadtool gadgets to a HiSoft Basic created window and then feeding the generated Gadtool events back to the Basic code in a way that allows HiSoft Basic to behave normally in all other respects!

Listing One

```
SETTING UP AND INSTALLING A MENU
USING GADTOOLS.

POKEB VARPTR(nm(0))+nm_Type%,NM_TITLE& POKEL
VARPTR(nm(0))+nm_Label%,SADD("Example Menu
Heading"+CHR$(NULL&))
POKEB VARPTR(nm(0))+x+nm_Type%,NM_ITEM&POKEL
VARPTR(nm(0))+x+nm_Label%,SADD("Quit"+CHR$(N
ULL&))POKEL
VARPTR(nm(0))+x+nm_CommKey%,SADD("Q"+CHR$(NU
LL))POKEB VARPTR(nm(0))+x+x+nm_Type%,NM_END&
g_menu_p&=CreateMenusA&(VARPTR(nm(0)),TAG_EN
D&)
dummy&=LayoutMenusA&(g_menu_p&,g_visual_info
_p&,TAG_END&)
dummy&=SetMenuStrip&(g_window_p&,g_menu_p&)
```

Message Port Swapping

When you open a window using the HiSoft Basic Window statement a structure is created whose address can be obtained from the WINDOW(7) function. This structure, as explained a couple of issues ago, contains a pointer to an IDCMP user port and, depending on the program being run, HiSoft Basic will set flags for the particular types of IntuiMessages it needs. It will then monitor the port and collect and act upon messages as they arrive. By creating a second message port, and then swapping the HiSoft window's UserPort% pointer for the second port that I've created I'm able to divert that message stream so that all of the messages meant for the HiSoft Basic routines get sent to my port instead.

To see how this helps let's suppose now that we create a set of Gadtool gadgets, attach them to the HiSoft created window, and then modify the window's IDCMP flag set to ask additionally for Gadtool gadget messages to be sent. The outcome is that my message port, now attached to the HiSoft window, will start receiving both the messages that HiSoft Basic has asked for, and the Gadtool gadget generated messages that our gadget set is producing. The important thing to realise is that whereas under conventional HiSoft Basic window use this message stream would be fed into HiSoft Basic – in the above situation the messages are being sent to my message port and because of this they're under my control!

Listing Two

```
THIS SKELETON GADGET SENSING LOOP, SIMILAR TO
THE ONE PRESENT IN THE TEST8.BAS EXAMPLE, IS
USING GADGET IDENTITIES FED BACK FROM A
DEDICATED GADTOOLSHANDLER%() ROUTINE.

g_exit_flag&=FALSE& 'force entry into loopDO
WHILE NOT -g_exit_flag&
g_gadget_id%=GadToolsHandler%(g_window_p&,g_o
rig_port_p&)
IF (g_gadget_id%>0) THEN            SELECT
CASE g_gadget_id%
CASE 1                         'DO SOMETHING
CASE 2                         'DO SOMETHING
      END SELECT
ShowMessage(GADGET$+STR$(g_gadget_id%))
    END IF
    WEND
```

As each message arrives I remove it from the port and look at them to see whether it has been generated by a Gadtools gadget or not. If it has then the details of the gadget's identity are extracted and the message replied to so that the sender knows that it's finished with. Any other messages that arrive are obviously intended for HiSoft Basic and so, instead of using and replying to them, I re-transmit them to the user port originally set up when HiSoft Basic opened its window, so HiSoft Basic still gets details of the events it originally asked for!

Now there are some technical difficulties in implementing an approach like this and I'm saving these discussions for next month. For the moment however I've provided some runable coverdisk code to illustrate the technique (the source is called test8.bas) and there are a few points worth mentioning: notice firstly that the gadget creation steps present in the CreateGadgetSet() routine are pretty much the same as I've outlined in the last couple of installments. The only difference is that we attach the gadget list to the window after it has been opened (rather than before) and to do this the intuition library AddGList&() function is used followed by a call to RefreshGadgets() (which causes the gadgets to be drawn).

Although not all of the GadToolHandler%() routine may make sense the area involving the IDCMP_GADGETUP& messages is worth examining because it shows how to extract a gadget identity. When a gadget message arrives the address of the gadget is stored in a field called IAddress% so all we do is locate the gadget and then look in its GadgetID% field like this...

```
gadget_p&=PEEKL(message_p&+IAddress%)
gadget_id%=PEEKW(gadget_p&+GadgetGadgetID%)
```

Notice too that the GadToolsHandler&() routine hides a lot of the message related code and just returns the gadget ID (or zero if the message that was handled wasn't a gadget message). This, as Listing Two illustrates, makes it easy to build clean case-select statements for handling gadget operations. Try to get a feel for as much of the the test8.bas example code as you can and, next month, I'll explain about the tricks that have allowed this port swapping to be done! ■

Building Songs

Now that we've seen how easy it is to take a few tracks of music and cobble them together into a song it's time for ***John Kennedy*** *to take a closer look at how to make sure the end result is something sensible.*

Each section of your song should have a common link or feel – that's fairly obvious. Adding four-on-the-floor house percussion to a backing track composed of a waltz-time harpsichord and Bartok-style atonal string section will probably not produce enjoyable results (although of course, you never know until you try – I'll leave this one as an exercise for the reader). What can be less than obvious is why one particular bassline for example can sound totally pathetic with a particular drum loop, but completely kickin' with another fairly similar percussion pattern.

Additionally, although disparate musical styles don't usually work well together, there can be exceptions, and already fairly close types of music can often be blended together for excellent results, culminating with a completely new and accepted style. Witness, for instance, the coming together of hardcore breakbeat and dark dub styles that became Drum and Bass – and is now going full circle to merge with an earlier strand of dance music to form breakbeat-techno.

To a certain extent the only way to discover which patterns of music will go together is to experiment – 99 times out of 100 you might have wasted your time, but it will be worth it for that one time when you come up with something extra special. On the other hand, there are a number of loose rules of thumb (which of course you don't have to stick to, but serve as a useful starting point).

```
         (Note for the following examples,
         X = Normal volume
         o = about 2/3 volume
         C3 = middle C)


         House Percussion

               1...2...3...4...1...2...3...4...

Kick           X   X   X   X   X   X   X   XXXX
Snare              X       X  X    X  X  X X
Cl. HiHat      X   X  XXX  X   X   XX XX   XX X
Op. HiHat        X   X   X   X   X   X   X   X
```

Listing One: House Percussion – a simple techno drum pattern (running at around 130-140bpm).

> "the only way to discover which patterns of music will go together is to **experiment**."

Abide by the rules

Note that the techniques discussed here apply equally to whatever method you are using to sequence sounds on your Amiga, from trackers playing the Amiga's internal samples to sequencing software driving external MIDI hardware.

```
       EuroBass

               1...2...3...4...1...2...3...4...

C3
B3
A3                               XX  XX
G2                                       XX  XX
F2
E2               XX  XX  XX  XX
D2
C2
B2
A2                             X   X
G1                                     X   X
F1
E1             X   X   X   X
D1
C1
```

Listing Two: Eurobass A completely non-standard notation for the octaving Euro-bassline.

Jargon

BPM: Beats per Minute. Does exactly what it says on the tin – literally the number of beats in a given minute, used to denote the speed of a song.
MIDI: Music Instrument Digital Interface – a connection standard that allows intruments to be linked to each other and to computers.
Sample: A sample is a file which contains data which when send to suitable hardware makes a sound. You can create a sample by passing a sound though an "analogue to digital converter": a device normally known as a sampler.
Sequencer: A computer program (or very old hardware) which can store notes and replay them. The notes can be edited, timing adjusted and complex songs constructed.
Tracker: A program commonly used on the Amiga for creating music. It's called a tracker because there are usually four (or more) tracks of notes which scroll up the screen, triggering samples.

```
        Triplet Bass

        1...2...3...4...1...2...3...4...

C3
B3
A3
G2
F2
E2      X   X  X  X  X  X
D2
C2
B2
A2                                X  X
G1                        X X  X
F1
E1
D1
C1
```

Listing Four: Triplet Bass – if this is played at the same time as the Syncopated Rhythm then the off-beat-notes sound very messy. Try playing with the House Percussion.

```
      Syncopated Rhythm

            1...2...3...4...1...2...3...4...

Kick        X      X  o   o X      X  o
Snare           X       X       X       X oo
Cl. HiHat   XoooXooXooXoXoooXoooXooXooXooXoo
Op. HiHat
```

Listing Three: Syncopated Rhythm – again the major feature of this is the off-beat notes, but the Eurobass on-the-beat rhythm tightens things up so that the combined sound is far tighter.

Since Variety is the Spice of Life and Music is the Rhythm, I suggest you season your songs liberally with cinnamon and nutmeg. Oh sorry, wrong article. Actually, the reason I've just dusted-off my copy of "Magazine Writers' 1000 handy Cliches" is to introduce the concept of variety of rhythm. What I mean by this is the idea of making each track used to construct your song have a slightly different rhythmic feel from each of the others. To illustrate this, let's look at a couple of examples (for now I'll stick to percussion and bass).

(Note for all of the following examples and listings,
X = Normal volume   o = about 2/3 volume
C3 = middle C)

House Percussion

You may remember from a couple of months ago, I suggested a couple of simple drum patterns you could use as starting points for your own rhythm tracks. Well, just in case you don't here's one of them again. **Listing One** is a simple techno drum pattern (running at around 130-140bpm).

EuroBass

Since I'm in the mood for cliches, let's also dust-off that old favourite, the octaving Euro-bassline (actually coming back into favour at the minute, check out JX "Can't keep my hands off you" as an example).

You've heard this a thousand times, it's the one with one note followed by two quicker notes exactly an octave up from the first, repeated. And repeated. And repeated. Sometimes a key change is nice too.

In an effort to standardise between the various notations used by trackers, sequencers, and standard musical notation. **Listing Two** is a completely non-standard notation that I've invented myself (and yes, I know I've only used the "white notes" here):

So, if you can manage to decipher my notation system, you can have a go at entering these two patterns, and be almost certainly disappointed with the results. Part of the reason that these two patterns sound poor together is that both share a common on-the-beat rhythm, and this sounds very boring. Now let's look at two different percussion and bass tracks.

Syncopated Rhythm & Triple Bass

Listing Three and **Four** are rhythmically very different from the first two, but quite similar to each other because the major feature of both is off-the-beat notes. If you try these two together it's a bit of a mess really.

Now the clever part is to swap the basslines from each of the two examples so that the Eurobass line is playing at the same time as the Syncopated percussion loop and the Triplet bass is accompanying the House percussion. Surprise! It sounds a lot better, and you haven't actually done anything except swapped a couple of sequences.

The reason they sound better is that the off-beat notes of the Triplet bass pattern fill out the rhythmic gaps left by the strictly-on-the-beat House percussion. The Eurobass on the other hand tightens up the feel of the Syncopated Rhythm so that the two patterns combined sound much more tightly on the groove.

Some other tips that I can suggest, again on the theme of contrast, is not to mix too many complicated patterns together. If you've programmed a fairly simple minimalist techno drum pattern, try and make your bassline and hooks fairly complicated to offer a variety to the ear. Balance this again with a simple string line.

Similarly, if you've a huge and insanely complicated Jungle drum pattern constructed from dozens of samples, it's usually a good idea to stick to a simple dub bass style.

Of course, there are always exceptions to these rules too – Spacetime Continuum's "Kaiko" has a complicated breakbeat style percussion track accompanied by an acoustic jazz bass which is itself comp!ex, and the results are excellent. If there is a rule to all this, it is that there are no rules – experiment and always use what sounds right to you, since that is ultimately what it's all about. ■

Suggested Listening

Now I'm sure that your musical tastes aren't even remotely like mine or John's, but it never does anyone any harm to listen to a few different sounds. You never know, they might give you some inspiration for your own work. These are some of the tracks I was listening to in order to try and get some inspiration for this article.

The EuroBass

NEW ORDER
"Blue Monday"
Quintessential eurobass sound.
JX
"Son of a Gun"
"Can't take my hands off you"
New format dance using that trusty old eurobass.

House Percussion

INNER CITY
"Good Life"

A classic still worth listening to for the use of on-the-beat percussion and triplet style bass riffs.

Sycopated Percussion Grooves

THE CHEMICAL BROTHERS -
"Leave Home"

Lots of noisy guitars, a solid bassline and an irrepressibly off-beat percussion track.

Comms Column

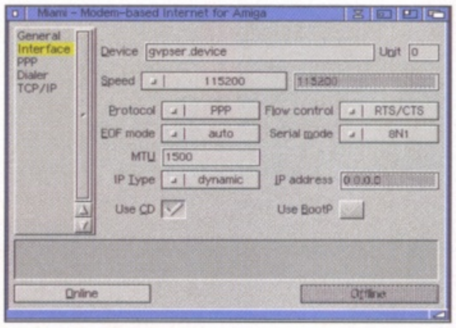
Darren Irvine *takes a look at a revolutionary new TCP/IP system and offers a few pointers to useful Web sites.*

Although there are several other alternatives, the only really sensible option for connecting a computer system to the Internet is to use the same protocol as on the rest of the net - and that means TCP/IP.

Miami

For a long time the only real choice if you wanted to get your Amiga connected to the Net was to run AmiTCP. Although AmiTCP is a very flexible implementation of TCP/IP and I've been using it for years myself, one thing it isn't is easy to install. Internet Service Providers (ISPs) such as the ubiquitous Demon Internet who support the Amiga have always provided an installer script to get users of their system up and running relatively painlessly (this installer has improved steadily over the past few years). Other ISPs have not been so forthcoming. The new system provided by Amiga Technologies is of a similar nature to AmiTCP – countless text files that must be updated by hand if you want to tweak your TCP/IP setup. Although both these systems mirror fairly closely the original implementation of TCP/IP (on Unix) they certainly don't win any prizes in the user-friendliness stakes. And if the Amiga is to remain a viable platform for Internet use (especially as far as attracting new users is concerned), something has to be done about this.

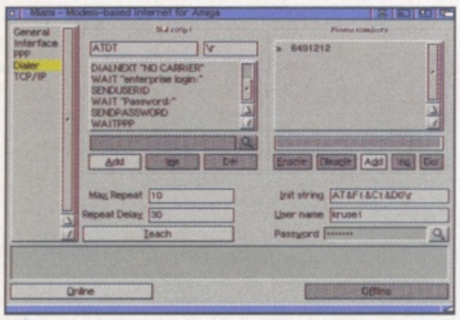
Fortunately (and at long last) a new TCP/IP implementation for the Amiga which uses a GUI based system to control all of the relevant TCP/IP parameters has been announced. The new system is called "Miami" and is due for a release sometime in June or July, and so may be available by the time you read this.



Setting up Miami's various communications options couldn't be easier.

The configuration for the Miami TCP/IP stack is to be completely GUI-driven, with no fiddly environment variables to set up or configuration files to edit. It will also incorporate it's very own phone dialer (something which always had to be obtained separately from AmiTCP and fiddled with separately too) and supports both SLIP and PPP type Internet connections.

If you haven't ever had the pleasure of installing AmiTCP to work with an ISP other than Demon, then you have no idea what a breakthrough the development of Miami represents. Installation is handled by a separate program, called MiamiInit, which is said to be able to automatically configure Miami for your respective Internet Service Provider. And since Miami has been designed to specifically replace AmiTCP (and also the older Commodore AS225 system) most of your existing AmiTCP compliant client and server applications should still work under the Miami TCP/IP stack. In theory at least, installing Miami on top of an existing TCP/IP setup should be a relatively straightforward operation, and shouldn't affect the operation of any Internet applications you are already using. Similarly, Miami should be extremely simple to install as your first time Internet TCP/IP system.



Miami incorporates it's very own dialup connection system, saving any further mucking around with configuration files.

IRC News

If you're new on the Net and want some Amiga related advice (or in fact information about any aspect of the Amiga), then you're in luck. On the Undernet a new channel #amigahelp has recently been started to provide just such a service.

Hopefully, since it's very purpose is to provide help, it won't suffer the same fate of some of the other IRC Amiga channels and become home to a bunch of superior-acting nerds who wouldn't give a newie the time of day. As usual, an Undernet server will do, but connecting to a UK site may be best for this channel.

The down side

I think it's safe to say that given the notorious reticence of Amiga users to pay for software, Miami's main big drawback will be that it costs money. However, it's not a lot of money when you consider the amount of hassle you will be avoiding by using the system. The registered version costs $40 (US), and a time-limited demo version will also be made available, so that you can see if it's suitable for your needs without shelling out the cash up front.

Miami also uses MUI, which although doesn't bother me in the slightest, always seems to upset some people. If you're not one of those sad few die-hard MUI haters, and are prepared to pay $40 (around £25) for a hassle free method of connecting to the Net, then Miami will be the system for you. ■

Resource Watch - Demo and Link Sites

RAW - The popular Amiga disk magazine RAW is available now on the World Wide Web. As well as the excellent articles contained in the online issues of RAW itself, there is a really great graphics gallery too: http://www.xs4all.nl/~blahh/RAW/RAW_Main.html

There are actually quite a few decent Amiga demo-scene sites now on the Web. Here are the URLs for just a few:

Amiga Demo List:
http://www.isbiel.ch/~wabem/adl/Main.

HTML CNCD Institute:
http://www.imagew.fi/cncdFairlighthttp://www.ludd.luth.se/~watchman/fairlight



Check out the excellent new online version of the disk magazine RAW.

Scene Online:
http://www.abc.se/~m9182

Spaceballs:
http://frodo.hiof.no/~toma

The Gathering 96:
http://www.io.hioslo.no/~michelt/TG96/index.shtml

The Party:
http://micro.ifas.ufl.edu/dominik/tp95

Other Amiga Links Pages:
Here are a couple of useful URLs to add to you're browsers bookmarks file. Both contain some useful Amiga material, but more importantly have an extremely comprehensive range of links to other Amiga related sites around the Web: http://www.kotakk.fi/~tys4jaha/links.htm
http://www.uib.no/it/pers/edorn/Amiga.html

AMOS Part 2

*As promised, we continue looking at **Malcolm Lavery's** Lottery Predictor program. If you remember, we were about to add the 3D buttons procedure so, without further ado, let's get to it.*

The '_3D_Button' procedure takes nine parameters and they are as follows: _ZONENUMBER, X, Y, WIDTH, HEIGHT,IN_OUT,TEX$,_ FILL, _INK - '_ZONENUMBER' is so you and Amos can ID a button. This ID will start at one and run consecutively - i.e. the next button you create will have an ID of two. It would be pretty useless if you couldn't refer to individual buttons. This is why we need the ID number.

'X' and 'Y' are the top left-hand co-ordinates in pixels where you want your button positioned on screen. 'WIDTH' and 'HEIGHT' are the width and height of the button you require in pixels, meaning you can have buttons of any size - from a few pixels to the size of the screen.

'IN_OUT' can be either zero or one, depending on whether you want the button to look on or off.

'TEX$' is the text string you want printed on your button.

'_FILL' is the ink colour you want your button coloured with. This can be useful to highlight buttons that are on, by changing its fill colour.

'_INK' is the border colour you require for your button. Now we know what the parameters do, all we need to do is call the '_3D_BUTTON' procedure like this:

```
_3D_BUTTON[1,5,14,90,15,1,"My Button",3,0]
```

And the procedure will do the rest for you. Don't forget the square [ ] brackets surrounding the parameters.

It is now time to code our main program loop. Virtually every program has a main loop and the trick is to make the contents of the loop as small as possible. Here it is:

```
Do      _CHECK_MAIN
Loop
```

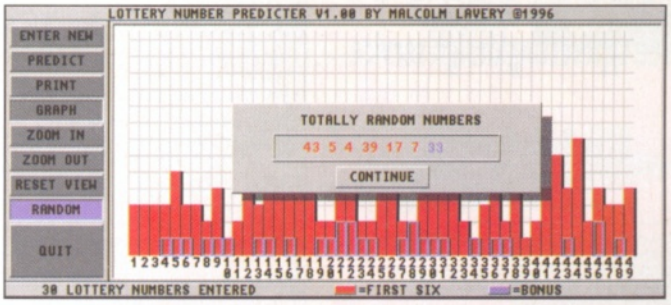
Now that's what I call a small main loop! All it does is call the procedure '_CHECK_MAIN' which itself checks the buttons for any mouse activity. '_CHECK_MAIN' is quite small and I suppose is the real main loop.

This is the main part of the procedure.

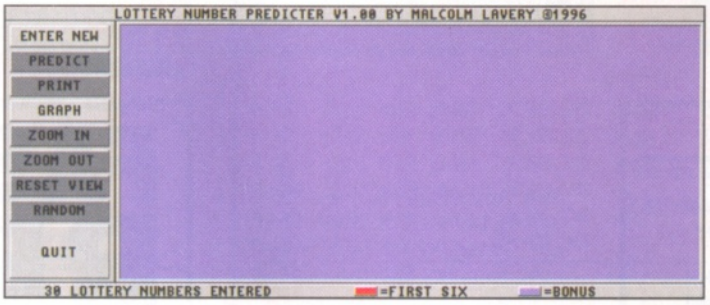
The variable 'M' will tell us which (if any) mouse key has been pressed by the user. The 'Z' will hold the zone that the mouse pointer is currently positioned over.

```
M=Mouse Key   Z=Mouse Zone
```

If 'M' equalled zero then no mouse keys are being pressed. If 'M' equalled one, then the left mouse key is being pressed. And if 'M' equalled two, then that has to be the right mouse key. Screen zones were set up in the '_MENU_DISPLAY' procedure and 'Z' will return the screen zone the mouse pointer is currently hovering over (if any).



The completed program looks very competent indeed. And so will yours.



Here's how far we've got with our code. Things are coming along nicely.

The next part is an 'IF END-IF' structure which means if the condition is false (i.e. 'M' does not=1 and 'Z' does not=9) the code between 'IF' and 'END IF' is ignored. If it HAS been pressed and the mouse pointer IS over zone 9, (which is the 'QUIT' button) then the program will execute the code in between the 'IF' and the 'END IF' lines and that would fade out the screen and end the program with a simple 'End' command.

```
   If M=1 and Z=9
_3D_BUTTON[9,5,158,90,38,0,"QUIT",4,0]
Wait 30      Fade 2      Wait 50      End
End If
```

If no action was taken by the procedure, then control is passed back to the main loop which will call the '_CHECK_MAIN' procedure again and again until the left mouse button is clicked over the 'QUIT' button. We will add more button tests next month.

On to another procedure now, the '3D_INFO' procedure. This is included in the code on the coverdisk, though it won't be used as yet. Next month though, we will be adding other procedures that will make use of '3D_INFO', so let's get it out of the way now. The '3D_INFO' procedure simply draws another type of 3D box designed especially for the random number generator of this particular program. It takes only four simple parameters: 'X' and 'Y' as you would expect are the top left hand corner of the box, 'WIDTH' and 'HEIGHT' are the width and height of the box in pixels. See the screenshot for a more illustrative example of the '3D_INFO' procedure in action.

If you run the updated source code from this month's coverdisk, you will see that we now have the 3D buttons displayed. However, only one of them will work so far - the 'QUIT' option. I have also included on the coverdisk the data file the Lottery program requires, which holds the Lottery numbers. It has only the first 30 draws contained on it, but I am sure you will enjoy updating it once we have the code set up in the program to allow you to do that. The data file is called 'Lottery_data' and must be in the same path as the main Lottery program.

Next month we will start to see some more action from the buttons so we'll both be seeing you then. ■

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Talking shop

A word of encouragement for AS, a solution for floppy users who want to use CanDo, a defector to PCs and much more. The AS letters pages give an honest appraisal of the current situation.

This month's letters bring some answers to questions about earlier issues of AS and some support for the magazine despite its falling page count. We might not be the biggest issue around, but we've still got some ardent supporters! And this month, no inclusions about the Walker or wish lists for future Amigas. We thought we'd take a rest from that subject until VIScorp lay out their plans.

Be grateful!

£25 Winner

I have not always found it easy to get your magazine, but have enjoyed it for years. I now have a subscription service that allows me to get the magazine regularly. For those who are writing to complain about fewer pages in AS, they are lucky to still have Amiga mags at all, I can assure them, since all our domestics have dried up, but one. It is hanging on at 48 pages a month. Also, I have ordered a number of things from you using credit card and have received consistently fine service, sometimes better than I get from some dealers stateside, though in honesty, computer vendors as a whole are excellent. Thanks and keep it up! I am tucked away in the Louisiana woods and rely on your mag for the very latest news, even though it must float the ocean. I just got the June issue and learned of the recent Amiga Technologies sale. Thanks once more for keeping us all informed.

Name Unknown
Louisiana, USA



I'm glad to hear that you are now able to get hold of AS every month. It is a great shame to have seen the downward spiral of Amiga mags recently, but it's an unavoidable result of a falling user base. However, as you point out, just because we have to suffer fewer pages doesn't mean that we have to turn out a sub-standard magazine and I think that AS manages to cram in a wealth of news, reviews, tutorials and advice as well as as much invaluable software on the disk as possible.

As you can read in this month's news section, the new owners of the Amiga have made some "gutsy decisions" as I believe you put it over the pond. I personally think that the Walker was a machine doomed to failure and that their ideas for a more powerful Amiga as well as their ability to get Amigas, disguised as the ED, into more homes than ever before, could be the best news for years. Don't misunderstand, the Amiga's fortunes are not going to be transformed overnight, but with a company that really knows the Amiga behind it, it's got the best possible chance.

How to contact us

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Future Publishing,
30 Monmouth St,
Bath, Avon BA1 2BW.

Alternatively, you can E-mail your letters to:
amshopper@cix.compulink.co.uk
davetaylor@futurenet.co.uk

All the letters received at these addresses will be considered for publication, unless you specifically advise us otherwise.

CanDo for floppies

I would just like to mention/ complain to you and help other unfortunate people like me. I finally got hold of an Amiga Shopper mag this month and saw CanDo on the front cover to my delight. Then as I was unarchiving it, it repeatedly told me it needed a hard drive (I haven't got a hard drive due to technical reasons). I unarchived it anyway, just to try. When it was decompressed onto three disks, I tried to load it, but to no avail. So, I had a bit of a shuffle, a quick edit of those tooltypes, a new startup-sequence and magically it loaded. Perfectly! Also, to go along with this it was on two disks and the examples on an extra (not needed) disk. It's not affected. I have an A600 with 2 floppies, WB 2.05 and 2Mb RAM and here's what you need to do:

1) Call the three disks Cando1, Cando2 and Cando3.

2) Cando1 requires the following files: Cando (program), CanDoReadMe (documentation), XtraTools (drawer, which should contain original files), C (drawer, which needs these CLI commands: Assign, Deckbinder, Deckrunner, Makedir), Env (drawer, no files required), Libs (drawer, with the following libraries: amigaguide, asl, CanDo, diskfont, iffparse, inovamusic, mathieeedoubbas, mathieeedoubtrans, mathieeesingtrans and mathtrans). Helpfiles (drawer, containing CanDo help) and S (drawer containing Startup-sequence and help.guide.

3) Cando2 should have all of the examples and utilities drawers.

4) Cando3 should have the following files: ObjectTools

AT contacts

If you want to contact Amiga Technologies, write to the following addresses:

John Smith,
Amiga Technologies GmbH (UK), Hunting Business Aviation Buildings, 1st Avenue, Stansted, Essex CM24 1QQ.
☎ 01279 680617.

Petro Tyschtschenko,
Amiga Technologies GmbH, Berliner Ring 89, D-64625 Bensheim, Germany.
Fax: 0049 6252 709 520
E-mail: gbo@lisa.amiga-tech.de

(drawer, with CanDo stuff in it), EditorTools (drawer, with CanDo stuff) and CanDoFiles (drawer, with, erm, more CanDo stuff).

5) The startup-sequence on Cando1 should contain the following information exactly. Add extras only if you know what you are doing:

```
Echo "Loading CanDo"
Assign >nil: Cando: Cando1:
Assign >nil: Cando: Cando3: add
Assign >nil: env: Cando1:env/
Makedir ram:t
Assign >nil: T: ram:t/
Cando1:cando
```

6) Load WB, open a Shell and execute the following command: Install Cando1: <return>

Now it will load up just like a hard drive. You will need two disk drives with Cando1 in df0: and Cando3 in the other. That's it! By the way, why is AS so hard to get hold of?

George Lloyd
Birmingham

Yes, well done. When we put CanDo on the Coverdisk, we did know that it was possible to edit all the floppy disks and create a system that would work on floppies. As you can see from your own solution, it is not a simple solution and we decided that it would be best if we stuck with the system requirements that were set out by the program's creators. After all, we were supplying the complete package in its original state and we couldn't really start to mess around with disk contents.

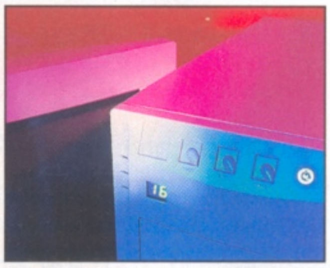
A large proportion of AS readers have hard drives, as we are the magazine aimed at the more serious reader, so it didn't seem fit to waste magazine space with details of creating your own floppy version. However, for those who are stuck with floppy drives, thanks for supplying this solution. It shouldn't be hard to do so long as you follow these instructions, but refer to your WB manual if you need to.

As to the reason for the difficulty in finding AS, that's down to the way that the magazine is distributed. It is sold as a "firm sale" magazine as opposed to "Sale or return", which means that the magazines are actually bought and then sold on by newsagents. Some don't want to stock magazines that they can't return and so they stop.

However, for magazines with smaller readerships, firm sale is the only choice as it guarantees returns and allows us to plan a future. The solution for readers is to either subscribe (phone 01225 822511) or to fill out the magazine reservation coupon on the Next Month page, which means the newsagent will know that they have a guaranteed reader.

Turning Siamese

I have an A500 with 2Mb RAM, but when I was reading the March



edition of AS, it only mentioned the A1200 for the Siamese System.

Is it possible to use it to turn an A500 into a PC? And if so, would I be able to load PC CD-ROMs and use a modem and the rest of the software and hardware to surf the Net.

David Morgen
Ucunelli

The Siamese System, which you can read more about this month in the News pages, requires an adequate SCSI interface. There is now a version that uses a serial connection, but given that the Siamese System is not a PC emulator, but a full PC which is linked to the Amiga, then you'd be better off just putting the two machines side by side and just using whichever suits your purpose for the work you're doing.

The point of the Siamese is to integrate the two architectures so that the two machines have better access to the files on each machine. This is a system that allows serious Amiga users to obtain better performance and up their productivity by using either machine to work on a file, depending on whichever is more suitable.

With the Siamese running, you can use a single monitor and just the Amiga's keyboard, switching between machines as you want, but this does not mean that they are a single machine. They remain individual systems, so that both processors can undertake separate tasks simultaneously. If you still want more information, contact Hi-Q on 01525 211327.

Easier Archives

Thanks for replying to my query (AS63, "Archives made easier"). When I said "there is no way of knowing exactly what is in each archive", I didn't mean to the extent that there were no results from using either the "v" or the "l" option in LZX. I just meant I'd like a simple ReadMe file detailing which programs are in the archives. You know, something like: "as1.lzx WW5TD". Surely that wouldn't take up too much space or time? Although not comfortable with archivers, I am still more at ease than relying on a Coverdisk which takes over my Amiga.

Although I really enjoy Amiga Shopper, I must agree with Ken Ferguson (AS63) who said that your reviews are not terribly "in depth" (in comparison with CU Amiga). Hope the Escom/VIScorp situation doesn't slow things down again.

Steve Grabham
Australia

Well, Steve, you'll be glad to see a short text file on the Coverdisk which does list the programs enclosed in the archives. It's also a bit much to say that the Coverdisks take over your Amiga. They are AmigaDOS scripts. How else would it be possible to have the archives unpack? I'm not going to comment on our comparison with other magazines, but let's just say that our reviews retain the ability to put across the correct information about products while remaining accessible to all levels of readers.

And yes, we all hope that the buyout doesn't slow down development and progression of the new Amigas.

Is there any hope?

I feel that the Amiga has been let down badly in the last 12 months or so. After the wondrous things Escom have done (putting the price up and all) and probably another owner who is going to do what, more promises of a mega machine, more support than Tower bridge – I think not. I see no new software that doesn't cost a fortune (apart from some quite good PD, Shareware and updates of some already excellent software). There's no new games. The price of RAM, CD drives, etc has come down slightly, but the PC equivalents are nearly free.

As a conclusion, it is with great regret that I have to say, the PC wins and my Amiga is laid to rest. I hope that Future Publishing have a mag that comes somewhere near the quality of AS. Thanks for a magazine which has been a great help on many occasions as well as a "right riveting read", but the PC arrives next week.

P Greenwood
Rochdale

It's a good job we don't publish full addresses as I'm sure you'd get bags of hate mail. At least the Amiga is now owned by people who know what it does, but it remains to be seen what they can do with it.

There is no doubt that the PC has stolen all but the remaining ground from the Amiga's niche, but if you think Amiga software is pricey, wait until you get a load of PC prices! Admittedly some of their hardware is a little cheaper (although in the case of the CDs, it's likely that you are talking about IDE CD drives, whereas most Amiga ones are SCSI and the price of a SCSI drive on the PC is comparable). However, it's hardly free.

Future Publishing has plenty of quality PC mags, so I'm sure we haven't seen the last of you, but it is still sad to see any reader go. We shall hold a wake on Friday. Thanks for the kind words. We shall hold on as long as possible bringing the best coverage we can to the remaining Amiga faithful. ■

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AMIGA SHOPPER

Issue 66



Software for free?

With the demise of the Amiga market, there are fewer commercial products appearing and fewer users prepared to pay for them. Quality software hasn't disappeared from the Amiga though. Far from it. Nowadays everything from word processors to image processors and from filofaxes to emulators can be found for free or nearly free in the Public Domain. What are the advantages of PD and Shareware? What are the different types of "ware" and most importantly, which are the PD products you should get hold of? We'll be providing the definitive guide that will help you get the ultimate collection of applications and utilities to make your Amiga computing professional and yet cheap.

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In the next issue we hope to have reviews of StormSea, the Genius 1212HR graphics tablet and Infrarexx – the system that allows you to control infra red controlled systems with your Amiga! We also plan to take a look at the latest version of ClariSSA, Emplant and Monument Designer. Next month's Coverdisk will contain the best of the latest releases for you to try out for yourself.

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Regulars

All the AS regulars will be in next month. As well as Answers and the Public Domain, there'll be the Comms column, the excellent Coverdisk and the How to... series. The tutorials continue with HiSoft BASIC, CanDo, Music and AMOS.



September issue **66.** On sale Tuesday, **23th July** 1996

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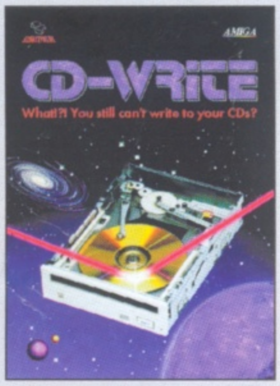
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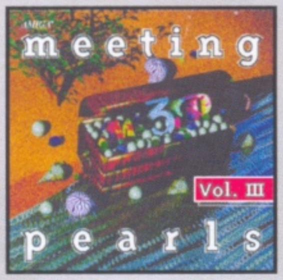
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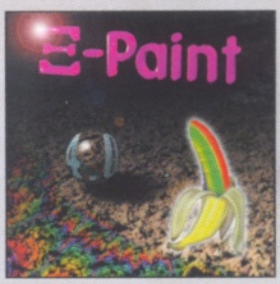
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